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DEFENSE INFORMATION SYSTEMS AGENCY FY 1998/1999 BIENNIAL BUDGET ESTIMATE



Approved the printing orbital Destribution Contraction

RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E) **APPROPRIATION**

R-1, R-2, AND R-3 EXHIBITS

FEBRUARY 1997

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OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION & TECHNOLOGY)

DEFENSE TECHNICAL INFORMATION CENTER CAMERON STATION

ALEXANDRIA, VIRGINIA 22304-6145

REPLY REFER TO DTIC-OCP (703) 274-6847 (DSN) 284-6847 AQ M97-06-3979

SUBJECT: Request for Scientific and Technical Report

TO:

- 1. We have been unable to locate the report referenced below in the Defense Technical Information Center Collection. In accordance with DoDD 3200.12 "DoD Scientific and Technical Information Program" the Defense Technical Information Center is to receive two copies of the Technical Report cited below.
- 2. All copies of the report must be suitable for reproduction including a clearly marked distribution statement as described in DoDD 5230.24. (See reverse side for categories of distribution statement.) A clearly marked loan copy suitable for reproduction is acceptable.
- 3. If for any reason you cannot furnish the report, please return the copy of this letter annotating your reason on the reverse side.
- 4. A mailing label for shipping the reports and a DTIC Form 50 to obtain the AD number after processing are enclosed.

2 Encl

1. Mailing Label

2. DTIC Form 50

Chief, Programs

Management Branch

TITLE: Def Info Supageny FV1998/1999 Bienned Budget Estimate Research, Dev, test + Eval(ROT+E) appropriation R-1, R-2, al R-3 Exhibita Feb 97

DEFENSE INFORMATION SYSTEMS AGENCY FY 1998/1999 BIENNIAL BUDGET ESTIMATE



RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E) **APPROPRIATION**

R-1, R-2, AND R-3 EXHIBITS

FEBRUARY 1997

UNCLASSIFIED

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DEFENSE INFORMATION SYSTEMS AGENCY FY 1998/1999 BIENNIAL BUDGET ESTIMATE R-1 EXHIBIT

Program Element	FY 1996	FY 1997	PY 1998	FY 1999
0305108K C2 Research	1, 705	1,814	1,937	2,013
Total Applied Research (BA 2)	1, 705	1,814	1,937	2,013
3208045K C3 Interoperability	24, 712	24,941	25,670	25,648
0302016K NMCS-Wide Support	1,995	1,978	2,064	2,099
0302019K Joint/Def. Info. Sys. Engin. & Integ.	3, 622	4,468	4,721	176,4
0303126K Long Haul Communications	17, 788	22,479	14,520	15,254
0303127K Support of the Nat. Comm. Sys. (NCS)	3, 486	3,808	4,552	4,545
0303129K Defense Message System (DMS)	0	1,353	0	0
0303131K Min. Essen. Emerg. Comm. Netw. (MEECN)	2,520	2,110	2,381	2,450
0303149% C41 for the Warrior	¢	2,851	٥	·· •
0303153K Joint Spectrum Center	4, 702	Φ	0	0
Total Operational System Develop. (BA 7)	58,925	886'29	53, 908	55,967
		÷		:
Total Disa RDI65	50, 630	65,802	55, 845	57,980

DEFENSE INFORMATION SYSTEMS AGENCY (DISA) PROGRAM ELEMENT COMPARISON SUMMARY INTRODUCTION AND EXPLANATION OF CHANGES

- 1. General. This document has been prepared to provide summary information on the DISA Research, Development, Test and Evaluation Program to congressional committees during the FY 1998/1999 hearings. The R-2 and R-3 exhibits provide narrative information on DISA's RDT&E Program Elements and projects.
- 2. Comparison of FY 1996 and 1997 Data. A direct comparison of FY 1996 and FY 1997 data in the R-1 exhibit dated March 1996 will reveal only changes reflecting below threshold reprogrammings and Congressional action on the appropriation request.
- 3. Relationship of FY 1998/1999 Budget Structure to the FY 1997 Budget Approved by Congress. No change.
- 4. <u>Classification</u>. All exhibits in this document are unclassified.

RDTGE	BUDGET I	FEM JUSTII	FICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02					R-1 ITEM C2 Resea	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	TURE 0305108K			
COST (in millions)	FY96	FY97	FY98	FY 9 9	EY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
Command and Control Research/A10	1.705	1.814	1.937	2.013	2.075	2.138	2.183	2.235	Contg	Contg

A. Mission Description and Budget Item Justification:

resources. Accordingly, this program element is located in Budget Activity 02. The C2 research program was initiated to develop C2 as a scientific discipline, foster joint service techbase cooperation and demonstrations and develop a C2 emerging technologies, methodologies and theories of military command and control (C2), the application of research This program element represents DISA's portion of a joint DISA/multi-service effort that supports research into results to resolve the problems of C2 associated with joint operations and the optimal use of MILDEP laboratory curriculum for DOD.

University, Naval Post Graduate School and the Service War colleges. It addresses joint techbase issues including joint The project supports command and control basic research and applied research. The project consists of research and studies for high level issues in command and control, and the development of curricula for National Defense distributed ADP, Joint War Gaming, and technology sharing.

FY1996 Accomplishments

- Supported the development and execution of the Deputy Director of Research and Continued coordinating and managing the Joint Service C3 Science and Technology Program, developing an annual Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstration (JWID) (\$210K) (AUG 96) Joint Service Plan for C3 Research.
- Continued development and demonstration within the Global Grid test bed environment of Multi-level Security and data fusion (\$270K) (SEP 96)
- Continued basic and applied research in C2 architecture's theory and analysis tools. Continued basic research in Continued C3 Decision Aids and Data Fusion Symposia and the information exchange through Technical Panels for C3 (TPC3) subpanels. Formalized the expansion into the international arena. (\$405K) (SEP96)
- Continued C2 curricula for National Defense University and other DOD schools and analysis and studies of high level Conditional Event Probability Algebraic Logic (CEPAL) and its application to the C3 process (\$520K) (SEP 96) (\$300K) (SEP 96) \$1.705M Total

Page 1 of 4

RDTGE 1	BUDGET IT	EM JUSTI	ICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02					R-1 ITEM C2 Resea	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	TURE 0305108K			
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Command and Control Research/Al0	1.705 1.814	1.814	1.937	2.013	2.075	2.138	2.183	2.235	Contg	Contg

FY1997 Plans:

- Continue coordinating and managing the Joint Service C3 Science and Technology Programs and developing an annual Support development and execution of the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (\$400K) (AUG 97) Joint Service Plan for C3 Research.
 - Continue demonstrations within the Global Grid testbed environment of Distributed Computing Environment (DCE) capabilities in Multi-Media Security and fusion. Incorporate research into JWID arena for demonstration. (SEP 97) 0
- Continue C3 Decision Aids and Data Fusion Symposia and the information exchange through the TPC3 subpanels. Formalize the expansion into the international arena. Hold first international Symposia in Europe. (\$315K) 0
- Continue basic research in (\$509K) (SEP 97) Conditional Event Probability Algebraic Logic and its application to the C3 process. Continue basic and applied research in C2 architecture's theory and analysis tools. 0
- Continue C2 curricula for National Defense University and other DOD schools and analysis and studies of high level C3 issues (\$350K) (SEP 97) 0

\$1.814M Total

FY1998 Plans:

0

- Continue to formalize the international expansion of the Symposia Host the second international C3 Symposia in Europe/UK. (\$400K) (JUNE/SEP 98) Continue C3 Decision Aids Data Fusion Symposia. o
 - (\$250K) (SEP 98) Continue development of the C2 reference model and its application.
- Develop applications for Continue basic and applied research in C2 architecture's theory and analysis capability. (\$550K) (JUNE 98) analyses and tools. 0
- Continue development of C2 and Information Warfare related curricula for National Defense University and other DOD (\$393K) (SEP 98) schools.

Page 2 of 4

								DATE: Fe	DATE: February 1997	
RDTGE 1	BUDGET IT	RDIGE BUDGET ITEM JUSTIFI		CATION (R-2 Exhibit)	oit)					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02					R-1 ITEM C2 Resea	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	.TURE 0305108K			-
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02	FY 0.3	Cost to Complete	Total Cost
Command and Control Research/Al0	1.705	1.814	1.937	2.013	2.075	2.138	2.183	2.235	Contg	Contg

Continue with the establishment of the Advanced Concepts Technology (ACT) program as the DOD center of excellence for lessons learned. (\$344K) Continue analysis and studies of C3 and Information Warfare high level issues. (JUNE 98) 0

\$1.937M Total

FY1999 Plans:

0

- Continue to formalize the international expansion of the Symposia Continue C3 Decision Aids/Data Fusion Symposia. Continue to formalize the internation: effort. Host the third international C3 Symposia in Europe/UK. (\$400K) (JUNE/SEP 99)
 - Continue development of the C2 reference model and its application. (\$200K) (SEP 99)
- Develop applications for Continue basic and applied research in C2 architecture's theory and analysis capability. analyses and tools. (\$450K) (JUNE 99)
- Continue development of C2 and Information Warfare related curricula for National Defense University and other Dod (\$478K) (SEP 99) schools.
- (\$485K) (AUG 99) Continue analysis and studies of high level C3 and Information Warfare issues. \$2.013M Total

Page 3 of 4

Unclassified

Unclassified

RDTGE BU	UDGET IT	RDIGE BUDGET ITEM JUSTIFICATION	1	(R-2 Exhibit)	oit)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/02					R-1 ITEM C2 Resea	LITEM NOMENCLATURE Research/P.E. 0305	TURE 0305108K			
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Command and Control Research/Al0	1.705	1.814	1.937	2.013	2.075	2.138	2.183	2.235	Contg	Contg
B. Program Change Summary										
Previous President's Budget (FY 1997)	Y 1997)				<u>FY96</u> 1.819	<u>FY97</u> 1.856	·	FY98 1.944	FY99 2.024	
Appropriated Value Adjustments to Appropriated Value	lue				1.999 294	1.856				
Adjustments to Budget Year since FY 1997 Current Budget Submit/President's Budget	se FY 19 E's Budg		lent's 198)	Budget	1.705	1.814	,	007 1.937	011 2.013	
Change Summary Explanation: Funding: FY96 and FY97 reducti threshold reprogramming.	ions due	to Cong	on: reductions due to Congressional	adjustmer	adjustment to Defense-wide Investment Appropriation	nse-wide	Investmer	ıt Appropi	riation and	below
C. Other Program Funding Summary: N/A	ary: N/A									
D. <u>Schedule Profile</u>										
(U) <u>FY1996</u>										
Contract/study delivered 2nd qu (U) <u>FY1997</u>	quarter F	FY96								
Contract/study delivered 3rd qu (U) <u>FY1998</u>	quarter F	FY 97								
Contract/study delivered 3rd qu (U) <u>FY1999</u>	quarter F	FY98								
Contract/study delivered 3rd qu	3rd quarter F	FY99								
			Δí	Page 4 of	4					

Unclassified

I 37LON	BUDGET IT	RDIGE BUDGET ITEM JUSTIF	ICATION (ICATION (R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY 03	Cost to Complete	Total Cost
PE: 0208045K	24.712	24.941	25.670	26.648	28.227	29.867	30.509	31.205	Contg	Contg
T20 Center for Standards	2.294	1.674	1.632	1.677	1.840	1.988	2.025	2.067	Contg	Contg
T80 Technology Assessment and Insertion	.572	.550	.582	.598	.654	707.	.728	.751	Contg	Contg
T30 Test and Evaluation	14.490	15.043	15.447	16.029	16.873	17.804	18.267	18.862	Contg	Contg
T40 Major Range and Test Facility Base (MRTFB)	7.356	7.674	8.009	8.344	8.860	9.368	9.489	9.525	Contg	Contg

Mission Description & Budget Item Justification:

development and maintenance of a joint global architecture, interface and system standards, interface definitions, operational procedures and a test and certification program for C3 systems; and to function as an Operational Test Agency (OTA) to test/certify the Defense Information Systems Network (DISN), Defense Message System (DMS), and other strategic systems. This program element is under Budget Activity 07 because it involves efforts supporting operational To ensure interoperability and integration of Command, Control, Communications and Intelligence (C3I) systems through systems development.

Page 1 of 23

RDTGE	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interog	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	CURE 0208045K			
COST (in millions)	FY96	FY97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Center for Standards/T20	2.294	2.294 1.674	1.632	1.677	1.632 1.677 1.840 1.988 2.025 2.067 Contg	1.988	2.025	2.067	Contg	Contg

.. Mission Description & Budget Item Justification:

The primary goal is to guide development of standards within DoD and encourage industry adoption of standards supporting DOD The Center will manage development of The Center serves as DOD Executive Agent for centralized management of Information Technology (IT) standards. demonstrations, and develop the roadmap and business case analyses for transitioning technologies into leading edge When commercially available standards exist, they will be adopted. The Center will manage deuirement efforts. The Center will also select candidate technologies for advanced technology DOD unique requirement efforts. services

(U) FY 1996 Accomplishments:

- Develop standards profile to support procurement of Defense Information Systems Network (DISN) (Sep 96; \$146K).
 - Approve MIL-STD-187-700B, which provides for selected standards to evolve the future Defense Information System Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and (DIS) (Sep 96; \$52K).
 - commence update of standard on ATM User Network Interface (Jul 96; \$52K).
 - Complete development of Trusted Networking Security Standards (Sep 96; \$100K).
- Tailor Personal Communications Standards (PCS) to meet DOD needs (Sep 96; \$109K).
- Complete development of Draft ATM over a Tactical Network Standard (Aug 96; \$150K).
- Complete development of Data Communications Standards incorporating INTERNET Protocols (Sep 96; \$100K). Complete development of Standards to support the use of Commercial SATCOM (Sep 96; \$75K).
 - Revise and distribute parts of Joint Pub 6-05 (Ongoing; \$150K).
- Technical Standards support on Joint and Electronic Key Management Systems (Ongoing; \$85K).
- Validation and approval of Electronic Data Interchange (EDI) and DODISS Compartmented Work Station Security Standards (Ongoing; \$150K).
 - Validation and approval of initial Tactical Messaging Standards and initial Thin Stack Standards (Ongoing;

RDTGE	RDIGE BUDGET ITEM JUSTIF	EM JUSTIF	ICATION (FICATION (R-2 Exhibit)	it)			DATE: Fe.	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total
Center for Standards/T20	2.294	2.294 1.674	1.632	1.677	1.632 1.677 1.840 1.988 2.025	1.988	2.025	2.067 Contg		Contg

FY 1996 Accomplishments (cont'd): <u>(</u>2)

- Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD system (1st Qtr - 4th Qtr; \$310K).
 - Design and develop advanced UHF SATCOM Modulation (AUSM) (1st Qtr 4th Qtr; \$665K). \$2.294M Total 0

FY 1997 Plans: <u>(</u>2)

- Commence update of MIL-STD-187-700C for the DIS (1st Qtr 4th Qtr; \$150K).
- Technical Standards support on Joint and Electronic Key Management Systems (1st Qtr 4th Qtr; \$85K).
 - Exploration into User/System Developer Standards Requirements (1st Qtr 4th Qtr; \$186K).
 - Develop Multicasting Lower Layer 3 Routing Standards (1st Qtr 4th Qtr; \$154K).
 - Enhance Lower Layer 4 Multicasting Standards (1st Qtr 4th Qtr; \$105K). 0
- Revise and distribute parts of Joint Pub 6-05 (1st Qtr 4th Qtr; \$240K).
- Complete development of ITU X.400 Key Protocol Standards (1st Qtr 4th Qtr; \$74K). 0
- Validation and approval of Tactical Messaging Standards and initial Thin Stack Standards (1st Qtr 4th Qtr;
- Validation and approval of Tactical Directory Standard (1st Qtr 4th Qtr; \$90K). 0
- Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD system (1st Qtr - 4th Qtr; \$480K). 0

Page 3 of 23

RDTGE F	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	CATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY 0.1	FY 02	FY03	Cost to Complete	Total Cost
Center for Standards/T20	2.294	2.294 1.674	1.632	1.677	1.840	1.632 1.677 1.840 1.988		2.025 2.067 Contg	Contg	Contg

(U) FY 1998 Plans:

- Develop ATM Network-to-Network Interface Standards Profile (1st Qtr 4th Qtr; \$220K).
- Development of SHF, UHF, and EHF SATCOM Standards (1st Qtr 4th Qtr; \$550K).
- Technical support of SATCOM STANAG development (1st Qtr 4th Qtr; \$193K).
- Technical support to NATO TACOMS 2000 (1st Qtr 4th Qtr; \$200K).
- . Technical support to message (1st Qtr 4th Qtr; \$150K).
- Technical support to PM-EC/EDI (1st Qtr 4th Qtr; \$150K).
- Development of standards for Digitized Battlefield (1st Qtr 4th Qtr; \$100K).
- DOD technical requirements for Internet Engineering Task Force (1st Qtr 4th Qtr; \$69K). \$1.632M Total

(U) FY 1999 Plans:

- Develop ATM Network-to-Network Interface Standards Profile (1st Qtr 4th Qtr; \$220K).
- Development of SHF, UHF, and EHF SATCOM Standards (1st Qtr 4th Qtr; \$540K).
 - Technical support of SATCOM STANAG development (1st Qtr 4th Qtr; \$200K).
 - Technical support to NATO TACOMS 2000 (1st Qtr 4th Qtr; \$200K).
 - o Technical support to PM-DMS (1st Qtr 4th Qtr; \$150K).
- Technical support to PM-EC/EDI (1st Qtr 4th Qtr; \$150K).
- Development of standards for Digitized Battlefield (1st Qtr 4th Qtr; \$100K).
- DOD technical requirements for Internet Engineering Task Force (1st Qtr 4th Qtr; \$117K).

Page 4 of 23

		RDTGE E	SUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION	1	(R-2 Exhibit)	it)			DATE: February	bruary 1997	
APPROPRI. RDI&E, Del	APPROPRIATION/BUDGET RDI&E, Defense Wide/07	ST ACTIVITY					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
SOD	COST (in millions)	ons)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Center fo	for Standards/T20	ls/T20	2.294	1.674	1.632	1.677	1.840	1.988	2.025	2.067	Contg	Contg
B. Progr	Program Change Summary:	Summary:										
Pre	Previous President's Budget (FY97)	ident's Bud	lget (FY9	7)			<u>FY</u>	<u>FY96</u> 2.185	<u>FY97</u> 1.582	<u>FY98</u> 1.639	EY99	9 7 8 7
Apr	Appropriated Value Adjustments to Appropriated Value	Value o Appropria	ited Valu	Q.				1.759	1.582			
Adj	Adjustments to	o Budget Ye	ar Since	Budget Year Since FY97 President's		Budget	•)	70.	007	- 010	10
Cui	Current Budget	t Submit/President's Budget	esident'		(FY98)		2.	2.294	1.674	1.632		77
	Change Summary Explanation: FY96 and FY97 increase i FY98 and FY99 reductions	nge Summary Explanation: FY96 and FY97 increase is due to below threshold reprogramming FY98 and FY99 reductions due to revised fiscal guidance.	planation: increase is due to reductions due to	to below to revise	below threshold revised fiscal	d reprogr guidance.	amming.					
C. <u>Other</u>	Other Program Funding Summary:	unding Summ	ary:									
О&М	₹.				FY96 8.44	<u>FY96</u> 8.449	<u>FY97</u> 6.642	FY98 10.092	·	<u>FY99</u> 9.851	<u>Total Cost</u> Contg	↓ I
D. Sched	Schedule Profile:	 •										
FY 1996	3rd Qtr: E04th Qtr: M.DD	3rd Qtr: EC/EDI Standard 4th Qtr: MIL-STD-188-220 DISN Profile		(Revised Combat	Ne t	Radio Standard)	ard)					
FY 1997	1st Otr: UN 2nd Otr: Re	<pre>Qtr: UHF SATCOM 5KHz DAMA Waveform Standard (V Qtr: Revised X.500 PICS for Directory Services</pre>	KHZ DAMA O PICS f	Waveform or Direct	Standard (Voice) ory Services	(Voice)						

Page 5 of 23

RDTGE	BUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045	TURE 0208045			
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Center for Standards/T20	2.294	2.294 1.674	1.632	1.677	1.632 1.677 1.840 1.988	1.988	2.025	2.067 Contg	Contg	Contg

. Schedule Profile (cont'd):

FY 1997 (continued)

EHF SATCOM Medium Data Rate (MDR) Data Link Standard, Revision A 3rd Otr:

4th Qtr: SHF SATCOM Message Format Standard

All Qtrs: Develop VTC Standards Profile for ATM Networks FY 1998

Internet RFC on Common Security Labeling, Internet RFC on COUL Protocol 2nd Otr:

3rd Qtr: UHF SATCOM Data Control Standard, Revision A

EHF SATCOM Low Data Rate Data Link Standard, Revision E 4th Qtr:

All Qtrs: Develop VTC Standards Profile for LANs and Internet and Mobile Cellular Radios FY 1999

Internet Draft on Quality of Service additions to IP layer protocols 1st Otr:

2nd Qtr: Internet RFC on Mobile AdHoc Networking

3rd Qtr: Advanced EHF SATCOM Standard

Page 6 of 23

	RDT&	E PROGRAM E	RDIGE PROGRAM ELEMENT/PROJECT C		COST BREAKDOWN	WN (R-3)				DATE: February	1997
APPROPRIATION/BUDGET RDT&E, Defense Wide/07		ACTIVITY				R-1 C3 Ir	ITEM NOMENCLATURE nteroperability 0208	ENCLATU	RE 08045K/Ce	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standa	Standards/T20
A. Project (Cost Breakdown:	<u>س</u> : (\$000)			3 4 4	96	E & 0.7		000	000	
Systems	s Engineering	m			2,29	2,294	1,674		<u>r 1 9 8</u> 1, 63 2	1,677	
B. <u>Budget Acc</u> Support	Acquisition History and Plannin ort and Management Organizations	and gani	Planning Inf zations	formation:	: uc						
Contractor or Government	Contract Method/Type	Award or	Performing	Project							
Performing Activity	or Funding <u>Vehicle</u>	Obligation <u>Date</u>	Activity EAC	Office EAC	Prior to FY96	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to <u>Complete</u>	Total <u>Program</u>
LOGICON	C/CPFF	08/91	12,490	12,490	4,340	1,520	1,250	1,147	1,181	Contg	Contg
All Other Cont	Contracts					774	424	485	496	Contg	Contg
	SUBTOTAL CONTRACTS	TRACTS				2,294	1,674	1,632	1,677		
In House Engin	Engineering & Technical	ical Support: N/A	: N/A								
TOTAL PROJECT						2,294	1,674	1,632	1,677		
					Page 7 of	of 23					

RDIGE E	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	_
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K	TURE 0208045K			
COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY 0.1	FY02 .	FY03	Cost to Complete	Total Cost
Technology Assessment and Insertion/T80	.572	.550	.582	.598	. 654	.707	.728	.751	.751 Contg	Contg

. Mission Description & Budget Item Justification:

This project continues to plan and promote an expeditious and cost effective development of needed information technology capabilities by targeting R&D efforts to DOD mission needs and leveraging on DOD and industry developments. It provides for the transition of new technologies into leading edge and core information services.

(U) FY 1996 Accomplishments:

- Engineering for Network Engineering Assessment Facility (NEAF) (1st Qtr 4th Qtr; \$185K). 0
- Engineering for ATM systems for Non-Secure Internet Protocol Router Network (NIPRNET) and Global Combat Support Systems (GCSS) (1st Qtr - 4th Qtr; \$387K). \$.572M Total 0

(U) FY 1997 Plans:

- o Engineering for NEAF (1st Qtr 4th Qtr; \$200K).
- Engineering for ATM systems for NIPRNET and GCSS (1st Qtr 4th Qtr; \$350K).
 - \$.550M Total

(U) FY 1998 Plans:

- o Engineering for NEAF (1st Qtr 4th Qtr; \$200K).
- Engineering for ATM systems for NIPRNET and GCSS (1st Qtr 4th Qtr; \$382K). 0
 - \$.582M Total

Page 8 of 23

	RDTGE B	UDGET IT	RDIGE BUDGET ITEM JUSTIFICATION	11	(R-2 Exhibit)	it)			DATE: Fel	February 1997	
APPROI RDT&E,	APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Interop	1 ITEM NOMENCLATURE Interoperability 0208045K	FURE 0208045K			
	COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Techno	Technology Assessment and Insertion/T80	.572	.550	.582	. 598	. 654	707.	.728	.751	Contg	Contg
XΞ (Ω)	FY 1999 Plans: o Engineering for NEAF (1st Otr -	(1st ofr	- 4th Otr:	r: \$200K)							
	Engineering for \$.598M Total	ystems fo		ת	S (1st Qtr	- 4th	Qtr; \$398K)				
B. Pr	Program Change Summary:										
						FY	FY96	FY97	FY98	FY99	σl
	Previous President's Budget (FY97)	get (FY9	(/			S.	.571	.563	.584	.601	-
	Appropriated Value					6.	.954	.563			
	Adjustments to Appropriated Value	ted Value	A I)			382	82	013			
	Adjustments to Budget Year Since FY97 President's	ar Since	FY97 Pre		Budget				002	003	«
	Current Budget Submit/President's Budget Change Summary Explanation:	esident': on:	s Budget	(FY98)		3.	572	.550	. 582	.598	m
	FY96 decrease due to	Congress	to Congressional adj	ustment to	to Defense-wide		Investment A	Appropriation	ion & below	ow threshold	Ld
	reprogrammings. FY97 decrease due to Congressional	Congress		t tmont	Dofongo_m; do		+ + + + + + + + + + + + + + + + + + +	2 2 2 3 4			
	FY98-99 decrease due to revised fiscal	congress. to revise	ad cal	(1)	_		estment A	investment Appropriation	lon.		
c.	Other Program Funding Summary: N/A	a <u>ry</u> : N/A									
	ofi										
(<u>D</u>	All Otrs: Engineering for NEAF	for NEAF			•	i					
	Engineering ior Aim systems	IOF ATM :	_	tor NIPRNET and GCSS Page 9 of 23	rand GCSS	າ ແ					
				1	,						

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RDILE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	AKDOWN (R-3)	4 (R-3)		ļ —	DATE: February	у 1997
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	R-1 C3 I	R-1 ITEM NON C3 Interopera Insertion/T80	ITEM NOMENCLATURE nteroperability 0208 rtion/T80	rre 208045K/T€	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment Insertion/T80	ment and
A. <u>Project Cost Breakdown</u> : (\$000) Systems Engineering	<u>FY96</u> 572	<u>FY97</u> 550		<u>FY98</u> 582	EY99 598	
B. <u>Budget Acquisition History and Planning Information:</u> Support and Management Organizations						
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior Activity Vehicle Date EAC EAC FY96	to Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	Total <u>Program</u>
All Other Contracts	572	550	582	598	Contg	Contg
SUBTOTAL CONTRACTS	572	550	582	298		
In House Engineering & Technical Support: N/A						
TOTAL PROJECT	572	550	582	598		
Page	10 of 23					

RDTGE 1	SUDGET IT	RDTEE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	vit)			DATE: Fel	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/1	Test and Ev	R-1 ITEM NOWENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY 97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total
T30 Test and Evaluation	14.490	14.490 15.043	15.447	16.029	15.447 16.029 16.873		18.267	17.804 18.267 18.862 Contg	Contg	Contg

Take is performed throughout the entire life cycle including proof-of-concept, system development, system deployment, and system A. <u>Mission Description & Budget Item Justification</u>: Through effective life cycle test and evaluation (T&E), this project ensures that C3I and information systems (IS) developed by DOD Components are interoperable and permit flexible employment of forces throughout the upgrade and modification. This T&E includes interoperability, performance, operational test and evaluation, systems effectiveness and force effectiveness testing of all C3I and IS system standards and system interfaces used in joint and combined operations.

(U) FY 1996 Accomplishments:

- Provide independent operational evaluation and assessments of Defense Information Infrastructure (DII) programs, i.e., Defense Message System (DMS), Defense Information Systems Network (DISN), Global Command and Control System (GCCS) and Survivable Secure (Sep 96, \$1446K). Communications Network (SSCN).
 - Provide CINC interoperability testing and technical assistance; publish Lessons Learned Report sharing C4I problems, issues and solutions; (Ongoing; \$649K).
- Network, Defense Message System, AN/USC-42 (Mini-DAMA), Military Strategic and Tactical Relay (MILSTAR) Satellite Program, Ultrahigh Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VMF standards (Ongoing, \$6249K). Perform interoperability and technical testing for the following C4IFTW system interfaces and standards; Defense Information Systems
 - Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the Commander in Chief Joint Task Force planner operational guidance in the planning, establishment and employment of tactical multi-Service systems and the integration of these systems into the Strategic Document critical C3 equipment strings (Sep 96, \$800K). Network and Defense Information Infrastructure.
- support for automated information systems and programs: BETA and interoperability Test and Evaluation of Service-unique and Defense Message System joint projects. Types of testing include hardware acceptance testing (HAT), quality acceptance testing (QA), interface/interoperability certification testing (ICT), software change proposal testing (SCP), security test and evaluation (ST&E) In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation and DMS functional testing, (Ongoing, \$4503K).

RDTGE 1	BUDGET II	EM JUSTIE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	(R-2 Exhil	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM	R-1 ITEM NOMENCLATURE C3 Interoperability 02080	TURE 0208045K/7	Lest and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to	Total
T30 Test and Evaluation	14.490	14.490 15.043	15.447	15.447 16.029	16.873	17.804	18.267	18.862	Contg	Contg

(U) FY 1996 Accomplishments: (Continued)

Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 96, \$843K). \$14.490M Total

(U) FY 1997 Plans

- Evaluate systems operational effectiveness and suitability for fielding for the following Defense Information Systems Agency oversight programs: Defense Message System, Global Command and Control System, and Defense Information Systems Network; (Sep 97, \$1979K).
 - Provide interoperability testing and technical assistance, publish Lessons Learned Report sharing C41 problems, issues and solutions; (Ongoing, \$584K).

Page 12 of 23

RDTGE 1	BUDGET IT	EM JUSTIE	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	[R-2 Exhi]	bit)			DATE: Fek	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDIEE, Defense Wide/07					R-1 ITEM	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/T	est and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to	Total
T30 Test and Evaluation	14.490 15.043	15.043	15.447	16.029	15.447 16.029 16.873	17.804	18.267	18.862	Contg	Contg

A. Mission Description & Budget Item Justification: (Continued)

(U) FY 1997 Plans (Continued)

- Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems Perform interoperability and technical testing for the following C41FTW system interfaces and standards;, Defense Information Systems Network (DISN), AN-USC-42 (Mini-DAMA), Military Strategic and Tactical Relay (MILSTAR) Satellite program, Ultrahigh employing TADILS A/B/C/J, ATDL-1, USMTF and VMF standards; (Ongoing, \$5651K).
- Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the Commander in Chief Joint Task Force planner operational guidance in the planning, establishment and employment of tactical multi-Service systems and the integration of these systems into the Strategic Document critical C3 equipment strings; (Sep 97, \$778K). Network and Defense Information Infrastructure.
- support for automated information systems and programs: BETA and interoperability Test and Evaluation of Service-unique and Defense Message System joint projects. Types of testing include hardware acceptance testing (HAT), quality acceptance testing (QA), interface/interoperability certification testing (ICT), software change proposal testing (SCP), security test and evaluation (ST&E) In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation and DMS functional testing; (Ongoing, \$4943K).
- Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 97, \$958K).
 - Assesses CINCs intelligence systems interoperability initiatives; (Sep 97, \$150K). \$15.043M Total

(U) FY 1998 Plans

Combat Support System (GCSS), and Defense Information Systems Network (DISN) by certifying that critical requirements are supported by interoperable functionalities. Evaluate systems' operational effectiveness and suitability for fielding by documenting critical operational issues through an appropriate test, and referring results to the decision authority; (Ongoing; \$6096K). Test and Evaluation of DODs' major C4I programs--Defense Message System (DMS), Global Command and Control System (GCCS), Global

Page 13 of 23

RDTGE I	BUDGET II	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION ((R-2 Exhik	oit)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/1	est and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to	Total
T30 Test and Evaluation	14.490	14.490 15.043	15.447	15.447 16.029	16.873	17.804	18.267	18.862	Contg	Contg

(U) FY 1998 Plans (Continued)

- during exercises (e.g., RIMPACT, Unified Endeavor, Internal Look, Roving Sands, etc.) real world contingencies (e.g., Joint Endeavor in Bosnia) and operational assessments. Provide Lessons Learned Report on NIPRNET/SIPRNET addressing current interoperability C4I Technical Support to the Warfighter--Provide technical and operational support and expertise to CINCs, Services and Agencies problems and solutions; (Ongoing; \$1525K).
 - decisions of the Chairman, Joint Chiefs of Staff (CJCS) by providing test, evaluation and certification of C4I systems to ensure interoperability within and between systems, the sustaining base, the National Command Authority, and Service echelons and allies. Systems tested include High Frequency Automatic Link Establishment (HF/ALE), Ultra-High Frequency Demand Access Multiple Assignment (UHF DAWA), Universal Modem System, High Frequency Radio, Facsimile, Theater Deployable Communications (TDC), Tactical Data Link (TADIL A, B, J), Integrated Tactical Warning and Attack Assessment (ITWAA); (Ongoing; \$7826K). Joint C4I Interoperability Test and Certification--Support production decisions of the Defense Acquisition Board (DAB) and fielding Total \$15.447M

RDTGE F	BUDGET IT	EM JUSTIF	ICATION .	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	.TURE 0208045K/1	Test and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY 0.3	Cost to Complete	Total Cost
T30 Test and Evaluation	14.490 15.043	15.043	15.447	15.447 16.029	16.873	17.804	18.267	18.862	Contg	Contg

A. Mission Description & Budget Item Justification: (Continued)

(U) FY 1999 Plans

- Combat Support System (GCSS), and Defense Information Systems Network (DISN) by certifying that critical requirements are supported by interoperable functionalities. Evaluate systems' operational effectiveness and suitability for fielding by documenting critical Test and Evaluation of DODs' major C4I programs -- Defense Message System (DMS), Global Command and Control System (GCCS), Global operational issues through an appropriate test, and referring results to the decision authority; (Ongoing, \$6417K).
 - during exercises (e.g., RIMPACT, Unified Endeavor, Internal Look, Roving Sands, etc.) real world contingencies (e.g., Joint Endeavor in Bosnia) and operational assessments. Provide Lessons Learned Report on NIPRNET/SIPRNET addressing current interoperability C4I Technical Support to the Warfighter--Provide technical and operational support and expertise to CINCs, Services and Agencies problems and solutions; (Ongoing, \$1604K).
 - interoperability within and between systems, the sustaining base, the National Command Authority, and Service echelons and allies. Systems tested include High Frequency Automatic Link Establishment (HF/ALE), Ultra-High Frequency Demand Access Multiple Assignment (UHF DAMA), Universal Modem System, High Frequency Radio, Facsimile, Theater Deployable Communications (TDC), Tactical Data Link (TADIL A, B, J), Integrated Tactical Warning and Attack Assessment (ITWAA); (Ongoing, \$8008K). Joint C4I Interoperability Test and Certification -- Support production decisions of the Defense Acquisition Board (DAB) and fielding decisions of the Chairman, Joint Chiefs of Staff (CJCS) by providing test, evaluation and certification of C41 systems to ensure \$16.029M Total

. Program Change Summary

FY97	13.080	14.449	187	396	14.490	ation
-	Previous President's Budget (FY 1997)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year Since FY 1997 President's Budget	Current Budget Submit/President's Budget (FY 1	Change Summary Explanation:

Page 15 of 23

RDTEE 1	BUDGET IT	RDTEE BUDGET ITEM JUSTIFI	ICATION (ICATION (R-2 Exhibit)	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07				:	R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/1	lest and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
T30 Test and Evaluation	14.490	14.490 15.043	15.447	15.447 16.029 16.873	16.873	17.804	18.267	18.862	Contg	Contg

Program Change Summary (Continued)

FY96-FY97 change is due to congressional adjustment to Defense Wide Appropriations and below threshold reprogramming. FY98-FY99 adjustment is due to revised fiscal guidance and realignment of funds. Funding:

Technical: N/A Schedule: N/A

Other Program Funding Summary: N/A

RDTEE E	BUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhil	oit)			DATE: Fek	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/T	lest and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96	FY97	FY98	FY 9 9	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
T30 Test and Evaluation	14.490	14.490 15.043	15.447	16.029	16.873	15.447 16.029 16.873 17.804 18.267	18.267	18.862	Contg	Contg

D. Schedule Profile:

(U) FY 1996

- 2nd Quarter Independent Evaluation Report (IER) for Phase I DISN testing; DMS X.400 project; OT&E of DISN Integrated Network Management System (INMS), GCCS and others.
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMIF and VHF standards.

(U) FY 1997

- 2nd Quarter DMS X.400 project; OT&E of DISN INMS, GCCS and others.
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

(U) FY 1998

- o 2nd Quarter DMS X.400 project; OT&E of DISN INMS, GCCS and others.
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J. ATDL-1. USMTF and VHF standards.

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RDTGE 1	BUDGET IT	EM JUSTIF	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhil	oit)			DATE: Fel	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEN C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208	TURE 0208045K/	Test and Ev	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
T30 Test and Evaluation	14.490 15.043	15.043	15.447	15.447 16.029	16.873	17.804	18.267	18.862	Contg	Contg

(U) FY 1999

- o 2nd Quarter DMS X.400 project; OT&E of DISN INMS, GCCS and others.
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultra-High Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

	RD	RDIGE PROGRAM ELEMENT/PRO	ELEMENT/PROJ	JECT COST	COST BREAKDOWN	(R-3)			DATE:	February	1997
APPROPRIATION/BUDGET A RDT&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDTEE, Defense Wide/07	VITY				R-1 ITEN C3 Inter	ITEM NOMENCLATURE nteroperability 020	.ATURE .ty 02080	45K/Test	ITEM NOMENCLATURE Interoperability 0208045K/Test and Evaluation/T30	on/T30
A. Project	Project Cost Breakdown	T	***			FY96	FY97	7	FY98	FY99	
C3I Inte	roperability	and Informatio	C3I Interoperability and Information Systems Testing	ing		14,490	15,043	143	15,447	16,029	
B. Budget A	equisition His	story and Plan	Acquisition History and Planning Information	uo							
Test and	Evaluation Organization	anization									
Contractor or Government	Contract Method/Type	Award or	Performing	Project				٠			
Performing Activity	or Funding Vehicle	Obligation <u>Date</u>	Activity <u>EAC</u>	Office EAC	Prior to <u>EY96</u>	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget FY99	Budget To Complete	Total <u>Program</u>
*LOGICON	C-CPAF	08/91	12,252	12,252	11,856	916	180			Contg	Contg
*INTEROP	C-CPAF	08/91	12,870	12,870	12,456	2,759	2,147	2,314	2,467	Contg	Contg
*BDM	C-CPAF	08/91	11,880	11,880	11,525	2,189	2,147	2,314	2,467	Contg	Contg
*VALIDITY	C-T&M	10/91	3,769	3,769	3,158	2,001	2,147	2,314	2,467	Contg	Contg
All Other Contracts	racts				1,371						
		Subtotal Contracts	racts		40,366	7,865	6,621	6,942	7,401	Contg	Contg
In House Engineering &	eering & Techn	Technical Support									
		Subtotal In-House	onse			6,625	8,422	8,505	8,628		
TOTAL PROJECT						14,490	15,043	15,447	16,029		
*Current OMNIBUS	WS contracts e	contracts expire and new contracts award		ed in 2nd qua	2nd quarter of FY 97. Page 19 of 23	97. 3					

UNCLASSIFIED

								DATE: Fek	DATE: February 1997	
KDI44	SUDGET IT	EM JUSTIF	ICATION (KUTEE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)					
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM No C3 Interoper Base (MRTFB)	R-1 ITEM NOMENCLATURE C3 Interoperability 0208 Base (MRTFB)	TURE 0208045K/M	fajor Range	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRIFB)	cility
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
T40 Major Range and Test Facility Base (MRTFB)	7.356	7.674	8.009	8.344	8.860	9.368	9.489	9.525	9.525 Contg	Contg

Indirect operation/maintenance expenses, overall A. <u>Mission Description & Budget Item Justification:</u> This project provides resources to operate DISA's Joint Interoperability Test Command (JITC) which is a member of DOD's Major Range and Test Facility Base (MRTFB). Indirect operation/maintenance expenses, ov testbed improvement and modernization, and facility and logistics support are included in this project.

(U) FY 1996 Accomplishments:

- Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal and resources; provide base operations business support to JITC's testing mission; (Ongoing; \$1576K).
 - Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing, \$5780K). \$7.356M Total

(U) FY 1997 Plans:

- Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal Continue to refine the automated systems to facilitate test and evaluation and maximize use of test assets; Maintain the Corporate and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing; \$1921K).
 - Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing; \$5753K). Total \$7.674M

(U) FY 1998 Plans:

Recurring maintenance of JITC's automated systems to facilitate test and evaluation and maximize use of test assets; Maintain the Corporate Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing, \$1921K).

Page 20 of 23

RDT&E BU	JDGET IT	EM JUSTIF	ICATION (RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fel	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NC C3 Interoper Base (MRIFB)	R-1 ITEM NOMENCLATURE C3 Interoperability 0208 Base (MRTFB)	TURE 0208045K/M	fajor Range	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRTFB)	cility
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
T40 Major Range and Test Facility Base (MRTFB)	7.356	7.674	8.009	8.344	8.860	9.368	9,489	9.525	Contg	Contg

A. Mission Description & Budget Item Justification: (Continued)

FY 1998 Plans: (Continued) Đ) Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing, \$2500K).

Indirect testing mission support; (Ongoing; \$3588K).

\$8.009M Total

FY 1999 Plans: 9

Recurring maintenance of JITC's automated systems to facilitate test and evaluation and maximize use of test assets; Maintain the Corporate Database and other microcomputer applications to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing, \$1921R).

Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing, \$2610K)

Indirect testing mission support; (Ongoing; \$3813K).

\$8.344M Total

Frogram Change Summary Previous President's Budget (FY 1997) Appropriated Value Adjustments to Appropriated Value	<u>FY96</u> 7.356 7.948 592	<u>FY97</u> 7.674 7.674	E <u>Y98</u> 8.009	FY99 8.344	
Adjustments to Budget Year Since FY 1997 President's Budget Current Budget Submit/President's Budget (FY 1998)	7.356	7.674	8.009	8.344	

Page 21 of 23

RDTGE 1	BUDGET IT	EM JUSTIF	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	oit)			DATE: Fel	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NG C3 Interoper Base (MRTFB)	R-1 ITEM NOMENCLATURE C3 Interoperability 0208 Base (MRIFB)	TURE 0208045K/M	(ajor Range	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRIFB)	cility
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
T40 Major Range and Test Facility Base (MRTFB)	7.356	7.674	8.009	8.344	8.860	9.368	9.489	9.525	Contg	Contg

Change Summary Explanation: FY96 change is due to congressional adjustment to Defense Wide Appropriations and below threshold reprogramming.

- C. Other Program Funding Summary: N/A
- D. Schedule Profile Milestones
- (U) FY 1996 through FY 1999

1st-4th Quarter - BOS and RPMAR and Corporate MIS Database; business process review and improvement; test infrastructure

	RD	RDISE PROGRAM ELEMENT/PROJ	RAM ELEMENT/PROJI	ECT COST	BREAKDOWN	(R-3)			DATE:	February	1997
APPROPRIATION/BUDGET A RDT&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEM NO C3 Interoper Base (MRTFB)	ITEM NOMENCLATURE nteroperability 020 (MRTFB)	k-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Base (MRTFB)	5K/Major		Test Facility
A. Project C a. Improveme b. Base Oper c. Other Ins	Project Cost Breakdown (\$000) Improvement and Modernization Base Operating Support (BOS) Other Institutional Expenses	wn (\$000) ernization (I£M) ort (BOS) Expenses				FY96 651 891 5,814	FY97 612 927 6,135	<u>Y97</u> 612 927 135	EY98 610 930 6,469	EY99 615 945 6,784	
TOTAL:						7,356	7,674	74	8,009	8,344	
B. Budget Ac	quisition His	Budget Acquisition History and Planning Informat	ning Informati	ion							
Contractor or Government Performing Activity	Contract Method/Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to <u>FY96</u>	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget To <u>Complete</u>	Total <u>Program</u>
*LOGICON/VALIDITY	C-CPAF	08/91	8,545	8,545	8,545	. 0	748	166	799	Contg	Contg
*INTEROP	C-CPAF	08/91	9,443	9,443	7,257	2,186	748	797	798	Contg	Contg
*BDM	C-CPAF	08/91	8,145	8,145	8,145	0	749	167	798	Contg	Contg
		Subtotal Contracts	racts			2,186	2,245	2,300	2,395	Contg	Contg
In House Engineering &	eering & Techni	Technical Support									
		Subtotal In-House	onse			5,170	5,429	5,709	5,949		
TOTAL PROJECT						7,356	7,674	8,009	8,344		
*Current OMNIB	US contracts ex	opire and new co	*Current OMNIBUS contracts expire and new contracts awarded in 2nd quarter of	d in 2nd qua	ΡΫ́	97.					
				С	Page 23 of 23						

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I 37.CH	SUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM National	R-1 ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Total Program Element (PE) Cost	1.995	1.978	2.064	2.099	2.214	2.329	2.379	2.476	Contg	Contg
NMCS Subsystem Engineering/T50	.400	.367	.406	. 431	.511	.595	609.	. 636	Contg	Contg
NMCS Command Center Engineering/S32	1.221	1.224	1.244	1.238	1.260	1.277	1.303	1.363	Contg	Contg
Support to Defense Support Activity (DSA)/260	.374	.387	.414	.430	.443	.457	.467	.477	Contg	Contg

. Mission Description and Budget Item Justification:

Concentrating on the CINCs, this engineering draws upon improved C2 methodologies and technology insertion opportunities to meet the command, control and information system requirements of the CINCs for all crises and security threats involving US military forces. These efforts emphasize interoperability and are designed to contribute directly to the achievement of the global C41 infrastructure. This program element is under Budget Activity 07 because it involves typing and technology insertions, technical specifications, systems engineering and integration, and technical assessments for NMCS Command and Control (C2) systems. This support provides informed, decision-making linkage between the This program provides concept development, requirements definition, proof-of-principle experiments, rapid proto-National Command Authorities (NCA) and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. efforts supporting operational systems development.

Page 1 of 18

RDTGE E	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	TURE numand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
NMCS Subsystem Engineering/T50	.400	.367	.406	.431	.511	.595	609.	. 636	.636 Contg	Contg

. Mission Description & Budget Item Justification:

Combat Support System (GCSS), and Defense Information Infrastructure (DII)). The incorporation of prototypes into Joint technological advances and identifies interoperability problems and generates associated solutions. This approach also provides system engineering support to C4I information systems by developing near-term prototypes to satisfy CINC/Joint Task Force (JTF) operational requirements. Through this prototyping technical approach, operational requirements are assessed, system performance is measured, system interoperability is demonstrated and standard DISA products are Warrior Interoperability Demonstration (JWID) demonstrations and command exercises provides real-time assessment of premiered in an operational setting (Defense Message System (DMS), Global Command and Control System (GCCS), Global applies to assessing command center capabilities and the implications of DMS, GCCS, GCSS and DII on future command development and integration time, as well as costs for command and control systems must be sought. This project To accommodate rapid changes in requirements and increasing budget constraints, new approaches to reduce center requirements.

U) FY 1996 Accomplishments:

- This configuration A prototype Special Operations Command Europe (SOCEUR) command and control configuration was operationally supports the SOCEUR JTF from a headquarters as well as deployable perspective (Sep 96; \$100K). installed second quarter FY96. Enhancement to the IOC configuration will be implemented.
- A proof-of-concept Personal Digital Assistant prototype was introduced to EUCOM for use in Joint Endeavor. prototype will be enhanced for operational use in deployment and redeployment planning (Jul 96; \$100K). 0
 - EUCOM Tiger Team report assessing baseline capabilities and implications of future C2 systems (Jul 96; \$75K). o
 - ICELAND Defense Force, Combined Operations Center, Tiger Team (Sep 96; \$125K). 0

Page 2 of 18

RDTGE 1	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
NMCS Subsystem Engineering/T50	. 400	.367	.406	.431	.511	.595	609.	. 636	.636 Contg	Contg

U) <u>FY 1997 Plans</u>:

- Integration of additional GCCS functionality, DMS and DII capabilities into JTF prototypes (Sep 97; \$95K).
- Technical analysis for operational implementation of EUCOM's Soldier's Digital Assistant (SDA) concept (Nov 96; 0
- Assess CINC/JTF prototypes (with DMS, DII capabilities) during major exercises and demonstrations (Jun 97; o
- EUCOM continued C2 systems integration for CINC/JTFs (Oct 96; \$73K). 0
- Continued C2 systems integration for CINC/JTFs (Jun 97; \$103K) 0

\$.367M Total

FY 1998 Plans:

<u>e</u>

- CINC/JTF prototype enhancements via integration of COTS/GOTS capabilities and emerging GCCS and DII technologies (Dec 98; \$306K).
 - o Technology assessment of CINC/JTF prototypes (Aug 98; \$100K). \$.406M Total

(U) FY 1999 Plans:

Continuation of CINC/JTF prototype evolution including software and hardware technologies to enhance two-way communication with warfighter, command and control from the foxhole to the commander (Sep 99; \$431K). \$.431M Total o

Page 3 of 18

RDIGE B	BUDGET IT	ITEM JUSTIFICATION		(R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Command		em (NMCS)-	System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NMCS Subsystem Engineering/T50	.400	.367	.406	.431	.511	.595	609.	.636	Contg	Contg
B. Program Change Summary:										
Drawione Draeidant, a Budgat 150071	100t	1,			EX	<u>FY96</u>	FY 97	FY98	드	බ ්
Appropriated Value					•	412	. s.	. 428	.465	ره د
Adjustments to Appropriated Value	ted Valu	υ				012	012			
Adjustments to Budget Year Since FY97 President's	ar Since	FY97 Pre		Budget				022	034	34
Current Budget Submit/President's Budget Change Summary Explanation	esident'	s Budget	(FY98)		•	.400	.367	.406		31
FY96 and FY97 change due to Congressional	due to C	ongressio		tment to	adjustment to Defense-wide investment appropriation.	ride inves	tment app	ropriatic	г •	
FY98 and FY99 adjustm	ents due	adjustments due to revised	₩.	fiscal guidance.	e.		•		-	
C. Other Program Funding Summary:	ary:									
Related RDT&E: Program Element #0208045K,	lement #	0208045K,	C3 Inter	C3 Interoperability.	ty.					
D. <u>Schedule Profile</u> : <u>FY1996</u> 3rd Qtr: EUCOM/Joint Endeavor SDA Engineering for GCCS-D 4th Qtr: JWID 96 Engineering and Integration of SDA SOCEUR Joint Special Operations Task Force (JSO' ICELAND Tiger Team - C2 system integration EUCOM - C2 system integration	Endeavor neering Special r Team -	int Endeavor SDA Engin Engineering and Integr Toint Special Operation Tiger Team - C2 system C2 system integration	SDA Engineering for GC and Integration of SDA Operations Task Force C2 system integration egration for CINC/JTFs	บั ต	CS-D (JSOTF) prototype enhancements	type enha	ncements			
			Pa	Page 4 of 1	18					

		RDTGE E	SUDGET IT	RDIGE BUDGET ITEM JUSTIF	'ICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	February 1997	
APPROPR RDIKE, D	APPROPRIATION/BUDGET RDIGE, Defense Wide/07	GET ACTIVITY					R-1 ITEM National M	ITEM NOMENCLATURE onal Military Comman	TURE	em (NMCS) -	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
ပ	COST (in millions)	lions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NMCS Sul Enginee	NMCS Subsystem Engineering/T50		.400	.367	.406	.431	.511	.595	609.	.636	Contg	Contg
FY1997	1st Otr: 3rd Otr: 4th Otr:	Technical EUCOM - cc Continued Assess CIN	analysis f ontinued C2 C2 system IC/JTF prot	for operational 2 system integra 1 integration for 1 totypes (with DM	lysis for operational implementation of nued C2 system integration for CINC/JTFs system integration for other CINC/JTFs TF prototypes (with DMS, DII capabilities additional GCCS functionality, DMS and	implementation tion for CINC/C other CINC/JTH IS, DII capabili	ional implementation of EUCOM's SDA concept. Integration for CINC/JTFs On for other CINC/JTFs Ath DMS, DII capabilities) during major exercises and demonst Sfunctionality, DMS and DII capabilities into JTF prototypes	EUCOM's SDA s) during ma DII capabil	SDA concept Ig major exerco	ises and o JTF pro	demonstrat	ions
FY1998	1st Qtr: 4th Qtr:	<pre>Qtr: CINC/JTF prototype enhancements via technologies Qtr: Technology assessment of CINC/JTF pr</pre>	ototype e ; issessmen	nhancemer t of CINC	ements via in CINC/JTF prot	a integration prototypes	integration of COTS/GOTS ototypes	GOTS capa	capabilities and emerging	and emerg	GCSS	and DII
FY1999	4th Qtr:	4th Qtr: Continuation of CINC/JTF prototype two-way communications with warfigh	n of CINC nunicatio	/JTF prot ns with w	otype evo arfighter	lution in , command	otype evolution including software and hardware rafighter, command and control from the foxhole	oftware a rol from	nd hardware the foxhole		technologies to to the commander	to enhance der
					Pa	Page 5 of 18	&					

	RDTGE	RDILE PROGRAM E	PROGRAM ELEMENT/PROJECT		COST BREAKDOWN	WN (R-3)			Δ	DATE: February	1997
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY				R-1 1 Nation	R-1 ITEM NOMENCLATURE National Military Command Syst. NMCS Subsystem Engineering/T50	ENCLATUR ary Commu		(NMCS)-Wide St	System (NMCS)-Wide Support/0302016K //T50
A. <u>Project Cos</u> Project C	oject Cost Breakdown: (Project Cost Categories	<u>m</u> : (\$000) ories			FY96		FY 97		FY98	EX99	
a. Syste	Systems Engineering	ering			400		367		406	431	
TOTAL					400		367		406	431	
B. Budget Acqu Support a	uisition Hi and Managem	Budget Acquisition History and Planning Information: Support and Management Organizations	Planning In zations	.formati	: <u>uc</u>						
Contractor or Co Government Me Performing ou	Contract Method/Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to <u>FY96</u>	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget FY99	Budget to Complete	rotal <u>Program</u>
Multiple C, Performing CI Activities CI	C/SS CPAF CPFF WR/PO					400	367	406	431	Contg	Contg
Government Furnished Property: N/A	shed Propert	y: N/A									
Total Project						400	367	406	431		
					Page 6 of	18					

RDTGE 1	BUDGET IT	EM JUSTIF	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	TURE	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	EY 03	Cost to Complete	Total
NMCS Command Center Engineering/S32	1.221	1.224	1.244	1.238	1.260	1.277	1.303	1.363 Contg	Contg	Contg

Mission Description and Budget Item Justification:

command center systems which provide the underpinning capabilities for the crisis/war decision-making processes of the National Command Authorities (NCA), the NMCS, and the Unified and Specified Commanders-in-Chief. Technical activities include requirements analysis, systems definition and engineering, and rapid prototyping. The project emphasizes the utilization of commercial-off-the-shelf (COTS) and emerging technologies for application in NMCS command centers in information processing and overall facility design to provide common solutions to theater, national, and world-wide This project provides overall system engineering and technical integration activities for a broad spectrum of crisis situations affecting the Department of Defense (DOD) and the Executive Office of the President.

(U) FY 1996 Accomplishments:

- Technical analysis for implementation of improvements of National Airborne Operations Center (NAOC) and Special Airlift Mission (SAM) aircraft (Sep 96; \$149K)
 - Engineering for implementation of an Airborne Communications Bus on Project Speckled Trout to interconnect mission equipment (Jun 96; \$200K). o
 - Published Secretary of Defense Senior Leadership Communications Architecture (SLCA) (Aug 96; \$180K). 0
- Engineering for qualitative operational test and evaluation of major NAOC improvements (Sep 96; \$65K).

0

- ments and development of engineering alternatives to improve strategic and crisis capabilities (Sep 96; \$140K) Providing technical analysis of National Military Command Center (NMCC) and NMCC Site R operational require-0
- Providing technical support for operational evaluation of FOC Special Technical Operations communications (May 0
 - Engineering for implementation of new consolidated red/black voice switching systems for NMCC and NMCC site R 0
 - Integration engineering and transition planning for critical NMCC C3 systems in response to the new NMCC Pentagon renovation for design of facilities and communications systems (Sep 96; \$175K). 0

age 7 of 18

RDTGE 1	SUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NMCS Command Center Engineering/S32	1.221	1.224	1.244	1.238	1.260	1.277	1.303	1.363	1.363 Contg	Contg

(U) FY 1997 Plans:

- Technical analysis for implementation of improvements to NAOC and SAM aircraft (Sep 97; \$98K).
- Engineering support for qualitative operational test and evaluation of major NAOC improvements (Sep 97; \$73K).
 - Trouble-shooting and support of current NAOC and 89th Wing operations (Sep 97; \$147K).
- Development of overall and individual systems and subsystem engineering, transition plans and test plans for moving the NMCC to another location in the Pentagon (May 97; \$551K). 0
- Engineering evaluation of new emergency message and TW/AA systems for the NMCC and NMCC Site R (Sep 97; \$171K). 0
 - Integration engineering and transitioning secure NMCC systems to the DMS (Feb 97; \$97K). 0
 - Revise and update the SLCA (Sep 97; \$87K). 0

\$1.224M Total

FY 1998 Plans: <u>n</u>

- Revise and update the SLCA (1st Qtr 4th Qtr; \$60K).
- Technical analysis for implementation of improvement to NAOC and SAM aircraft (1st Qtr 4th Qtr; \$120K).
- Engineering support for qualitative operational test and evaluation of major NAOC improvements (1st-4th Qtr;
- Trouble-shooting and support of current NAOC and 89th Wing operations (1st Qtr 4th Qtr; \$149K).
 - Automated Configuration Management for JS and NMCC (1st Qtr 4th Qtr; \$178K). NMCC Site R and STRATCOM Planning (1st Qtr - 4th Qtr; \$204K).
 - - NMCS DDO Upgrade (1st Qtr- 4th Qtr; \$15K).
- NMCS Engineering Support for integration of DII elements (1st Qtr 4th Qtr; \$164K).
- NMCC Relocation Connectivity to JCS and High Altitude Electromagnetic Pulse (HEMP) issues (1st Qtr 4th Qtr;
- \$1.244M Total NMCC Engineering of COM and ADP Systems (1st Qtr - 4th Qtr; \$199K) Page 8 of

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 COST (in millions) FY96 FY97 FY98 FY99 FY00 FY01	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	JRE mand System (NMCS		
FY96 FY97 FY98 FY99 FY00			3)-Wide Support	/0302016К
		FY02 FY03	Cost to Complete	Total
NMCS Command Center 1.221 1.224 1.238 1.260 1.27 Engineering/S32		1.303 1.36	1.363 Contg	Contg

(U) FY 1999 Plans:

- o Revise and update the SLCA (1st Qtr 4th Qtr; \$60K).
- Technical analysis for implementation of improvements to NAOC and SAM aircraft (1st Qtr 4th Qtr; \$120K).
- Engineering support for qualitative operational test and evaluation of major NAOC improvements (1st Qtr 4th Qtr; \$100K).
- Trouble-shooting and support of current NAOC and 89th Wing operations (1st Qtr 4th Qtr; \$149K).
 - Automated Configuration Management for JS and NMCC (1st Qtr 4th Qtr; \$177K). 0
 - NMCC Site R and STRATCOM Planning (1st Qtr 4th Qtr; \$203K).
 - o NMCS DDO Upgrade (1st Qtr 4th Qtr; \$15K).
- NMCS Engineering Support for integration of DII elements (1st Qtr 4th Qtr; \$160K). 0
 - NMCC Relocation Connectivity to JCS and HEMP issues (1st Qtr 4th Qtr; \$55K).
- \$1.238M Total NMCC Engineering of COM and ADP Systems (1st Qtr - 4th Qtr; \$199K)

3. Program Change Summary:

	FY96	FY97	FY98	FY99
Fievious Fiesident's Budget (FY97)	1.221	1.268	1.315	1.337
Appropriated Value	1.314	1.268		
Adjustments to Appropriated Value	093	044		
Adjustments to Budget Year Since FY97 President's Budget			071	099
Current Budget Submit/President's Budget (FY98)	1.221	1.224	1.244	1.238
Change Summary Explanation:				

FY96 and FY97 changes due to Congressional adjustment to Defense-Wide Investment Appropriation. FY98 and FY99 adjustments due to revised fiscal guidance.

Page 9 of 18

	RDIGE BUDGET		ITEM JUSTIF	FICATION ((R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPROPRI RDT&E, De	APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	:	:			R-1 ITEM NOMENCI National Military		ਰ	System (NMCS)-Wide	Wide Support	Support/0302016K
CO	COST (in millions)	FY96	FY 97	FY98	FY99	FY 0 0	FY01	FY 0.2	FY03	Cost to Complete	Total Cost
NMCS Cor Enginee	NMCS Command Center Engineering/S32	1.221	1.224	1.244	1.238	1.260	1.277	1.303	1.363	Contg	Contg
c. <u>othe</u>	Other Program Funding Summary O&M 0302019K	mary:	<u>FY96</u> . 635	EY97 EY	EY98 EY99	<u> EYOO EY</u>	Budget to EY01 Complete .091 Contg		Total <u>Cost</u> Contg		
D. Sche	Schedule Profile:										
FY1996	2nd Qtr: Develop Option 4th Qtr: Develop Option Provide system		Year 1 of contract Year 1 of contract engineering for imp	ract for ract for r impleme	contract for NMCS Engineering Test & Evaluation. contract for Command Center System Engineering. If for implementation of new NAOC red/black voice	neering T enter Sys f new NAC	ng Test & Evaluation System Engineering. NAOC red/black voic	Evaluation. Igineering. 'black voice	switching	y system.	
E Y1997	1st Qtr: Provide User Test & Evaluation criteria for NAOC Mod Blo 2nd Qtr: Develop Option Year 2 of contract for NMCS Engineering T 4th Qtr: Develop Option Year 2 of contract for Command Center Sys Complete Engineering for systems transition of new NMCC. SLCA update to provide CINCs and Service Chiefs guidance Senior Leadership Travel Communications System.	User Test & Option Year Option Year : Engineering late to provi	Evaluatio 2 of cont 2 of cont y for syst ide CINCs	contract for contract for contract for systems trans NCs and Servi Communication	lation criteria for NAOC Mod Block V. contract for NMCS Engineering Test & Evaluation contract for Command Center System Engineering. systems transition of new NMCC. NCs and Service Chiefs guidance on how to impro Communications System.	c Mod Blc neering T enter Sys new NMCC. guidance	ock V. est & Eva tem Engir	Evaluation. Igineering. W to improve	Mod Block V. Leering Test & Evaluation. Inter System Engineering. Lew NMCC. guidance on how to improve their positions	ositions of	the
<u>FY1998</u>	1st Qtr: Provide interactive distributed communications management syst 2nd Qtr: Integrate new DII elements into JS procedures. 3rd Qtr: Update on-line database reference systems with new subscriber 4th Qtr: Expand unclassified Internet capability. Annual update of SLCA. Page 10 of 18	eractive ew DII el ine datab assified te of SLC	distribut ements in pase refer Internet 7A.	uted communic into JS proce erence systen t capability.	munications ma procedures. systems with ne llity. Page 10 of 18	management new subscri 18	nt system :riber se:	system for NMCS ber services.	tasks.		

				
	/0302016K	Total Cost	Contg	
DATE: February 1997	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	Cost to Complete	Contg	
DATE: Feb	em (NMCS)-W	FY03	1.363	ά.
	rure mmand Syst	FY02	1.303	from Site
	R-1 ITEM NOMENCLATURE National Military Comman	FY01	1.277	SI
oit)	R-1 ITEM National N	FYOO	1.260	communications control
(R-2 Exhibit)		FY99	1.238	of commun vement. puipment S
		FY98	1.244	consolidation of ement. witching improven h HEMP Room Equip
RDIGE BUDGET ITEM JUSTIFICATION		FY97	1.224	les, conso provement leo switch with HEM.A.
BUDGET IT		FY96	1.221	tion issurminal in y and vicite of SLC
RDTGE	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	COST (in millions)	NMCS Command Center Engineering/S32	EY1999 1st Qtr: NMCC relocation issues, consolidation of communicating 2nd Qtr: NMCS ADP terminal improvement. 3rd Qtr: NMCC display and video switching improvement. 4th Qtr: NMCC DII integration with HEMP Room Equipment Suite. Annual Update of SLCA.

Page 11 of 18

RE	RDIGE PROGRAM ELEMENT/PROJECT COST	LEMENT/PRO	TECT COS	T BREAKDOWN	WN (R-3)				DATE: February	y 1997
APPROPRIATION/BUDGET A RDI&E, Defense Wide/07	ACTIVITY				R-1 Natio	ITEM NOMENCLATURE onal Military Comman Command Center Engi	ENCLATU cary Comm	R-1 ITEM NOMENCLATURE National Military Command System (N NMCS Command Center Engineering/S32	em (NMCS)-Wide S 1/S32	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K NMCS Command Center Engineering/S32
A. Project Cost Breakdown:	down: (\$000)									
Projected Cost Categories	ategories				,					
a. System Engineering	eering			<u>FY96</u> 1,221	<u>FY96</u> 1,221	<u>FY97</u> 1,224	H (-)	<u>FY98</u> 1,244	<u>FY99</u> 1,238	
B. <u>Budget Acquisition History and Planning</u> Support and Management Organizations	yuisition History and Plannin and Management Organizations	<u>Planning Inf</u> zations	formation:	: <u>uc</u>						
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle	oe Award or y Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	Total Program
Multiple Performing Activities					1,221	1,224	1,244	1,238	Contg	Contg
Government Furnished Property: N/A	erty: N/A									
TOTAL PROJECT					1,221	1,224	1,244	1,238		
				Page 12 o	of 18					

RDTGE 1	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1.ITEM National N	R-1.ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS)-	R-1.ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.374	.387	.414	.430	. 443	. 457	.467	.477	477 Contg	Contg
						1				

Mission Description and Budget Item Justification:

illumination of counter-proliferation issues. Research is also provided in a number of areas of special interest to the This project is unique in terms of the policy decisions supported and that the customers supported are actual DOD policy This project provides direct support to the Defense Support Activity (DSA) as prescribed in DOD Directive 5100.81. OSD's theater tactical ballistic and cruise missile defense community and Precision Guided Munition (PGM) communities, supports systems engineering, development of state-of-the-art technologies and the translation of these technologies 260 supports basic research and the acquisition and enhancement of software that aids in the into leading edge analytical models. Acquisition of support is provided by competitively awarded contracts. as well as the defense planning community, and the acquisition and employment policy making communities. decision-makers.

FY 1996 Accomplishments: 9

- Developed analytical tools to support assessments of joint warfighting operational plans' compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development focused on illustrating PGM effects and optimal deployment of theater missile defenses. (\$96K) Sep 96
- Acquired and enhanced leading edge analytical tools to rapidly illuminate policy issues in the following areas: 1) the probability of structural damage to deep underground targets; and

 - Analyzed the potential contributions of Navy Upper Tier defensive systems and sensor requirements. (\$90K) Sep 96 2) the effects of chemical and biological munitions on military operations.
- Developed analytical tools for the study of both the cruise missile defensive and ballistic missile defensive systems, technologies, logistics, and architectures. (\$55K) Sep 96 0
- (\$37K) Provided research support to the USD(A&T) as the cruise missile and ballistic missile threats evolve. 0
- \$.374M Total

Sep 96

o

0

Page 13 of 18

RDTGE 3	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM National P	R-1 ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016K
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Support to Defense Support Activity/260	.374	.387	.414	.430	.443	.457	.467	.477	.477 Contg	Contg
יביינת 1001 אם יווו										

- compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus Continue to develop analytical tools used to support assessments of joint warfighting operational plans' on illustrating PGM effects and optimal deployment of theater missile defenses. (\$100K) Sep 97
 - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas: 0
- 1) the probability of structural damage to deep underground targets; and
- (\$100K) Sep 97 2) the effects of chemical and biological munitions on military operations.
- Examine the effectiveness of current and planned theater, regional, and national defensive systems against emerging threats. (\$100K) Sep 97 0
- Develop analytical tools for the study of both the cruise missile defense and ballistic missile defensive systems, technologies, logistics, and architectures. (\$50K) Sep 97 o
- (\$37K) Provide research support to the USD(A&T) as the cruise missile and ballistic missile threats evolve. 0
- \$.387M Total

(U) FY 1998 Plans:

- compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus Continue to develop analytical tools used to support assessments of joint warfighting operational plans' on illustrating PGM effects and optimal deployment of theater missile defenses. (\$103K) Sep 98
 - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas: 0

Page 14 of 18

2) the effects of chemical and biological munitions on military operations.

1) the probability of structural damage to deep underground targets; and

(\$103K) Sep 98

RDTGE 1	BUDGET IT	RDTEE BUDGET ITEM JUSTIF	ICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Commans	TURE	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016К
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY 03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.374	.387	.414	.430	.443	.457	.467	.477	.477 Contg	Contg
· (P/+===/ === [d 0001 A4 (II/										

U) FY 1998 Plans (cont'd)

- Examine the ongoing Israeli/US ground based Theater High Energy Laser and the U.S. Airborne Laser programs for system efficacy and program performance. Provide alternatives and recommendations to USD(A&T).
- Evaluate National Missile Defense (NMD), Theater High Altitude Air Defense (THAAD), Navy Wide Area and Navy Theater Area Defense systems for performance and program effectiveness. Provide programmatic alternatives and recommendations to USD(A&T). (\$50K) Jun 98 0
- Evaluate the DOD Cruise Missile Defense (CMD) programs and management structure for effectiveness and provide alternatives and recommendations to USD(A&T). (\$50K) Jun 98 \$.414M Total 0

(U) FY 1999 Plans:

- This development will focus Continue to develop analytical tools used to support assessments of joint warfighting operational plans' on illustrating PGM effects and optimal deployment of theater missile defenses. (\$108K) Sep 99 compliance with the Secretary's guidance and to rapidly illuminate policy issues.
 - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the o
- 1) the probability of structural damage to deep underground targets; and
- (\$107K) Sep 99 2) the effects of chemical and biological munitions on military operations.
- Examine the effectiveness of current and planned theater, regional, and national defensive programs and systems for effectiveness against emerging threats and program performance. Provide alternatives and recommendations (\$135K) Sep 99 0
- Develop analytical tools for the study of both cruise missile and ballistic missile defensive systems, technologies, logistics, and architectures. 0

age 15 of 18

RDTGE 1	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National N	R-1 ITEM NOMENCLATURE National Military Comman	TURE ommand Syst	em (NMCS)-	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	/0302016К
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.374	.387	.414	.430	. 443	.457	. 467	.477	477 Contg	Contg

(U) FY1999 Plans (cont'd):

Provide ongoing special project research support to the USD(A&T) as the cruise missile and ballistic missile threats evolve. (\$30K) Sep 99

\$.430M Total

3. Program Change Summary:

FY99 . 432		-	002	
<u>FY98</u>			001	
EX97	.400	013	.387	
FY96	.405	031	.374	
Previous President's Budget (FY97)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year Since FY97 President's Budget Current Budget Submit/President's Budget (FY98)	

Change Summary Explanation:

FY96 and FY97 changes are due to Congressional adjustment to Defense-Wide Investment Appropriation. FY98 and FY99 changes are due to revised fiscal guidance.

C. Other Program Funding Summary:

Not applicable.

Page 16 of 18

RDTEE BI	UDGET IT	BUDGET ITEM JUSTIFICATION		(R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM National M	R-1 ITEM NOMENCLATURE National Military Command		System (NMCS)-Wide	Wide Support	Support/0302016K
COST (in millions)	FY96	FY97	FY98	FY 9 9	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
Support to Defense Support Activity/260	.374	.387	.414	.430	.443	.457	.467	.477	Contg	Contg
D. Schedule Profile:										
Fiscal Year actual and planned	events	by quarter	ធ							
	FY 1 2	FY96 3 4	FY97 1 2 3	97 3 4	FY 1 2	FY98 3 4 1	FY99	4		
Annual Renewal of contract	×		×		×		×			
									-	
			í	Ų	<u>.</u>					
			ממ	rage 1/ of	Ť					

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	IN (R-3)			DATE:	February	1997
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	R-1 ITE National Support	R-1 ITEM NOMENCLATURE National Military Command Support to Defense Support	LATURE ' Command System (NMCS) e Support Activity/Z60	stem (NMC	CS)-Wide Sup 260	System (NMCS)-Wide Support/0302016K
A. Project Cost Breakdown: (\$000)						
Project Cost Categories	FY96	FY97		FY98	<u>EY99</u>	
a. Basic Research and Software Analysis	374	387		414	430	
TOTAL	374	387		414	430	
B. <u>Budget Acquisition History and Planning Information</u> : Support and Management Organizations						
or Contract Method/Type Award or Performing						
Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC EAC FY96	Budget Bu FY96 FY	Budget Budge FY97 FY98	Budget Budget FY98 FY99	·	Budget to Complete	Total Program
Multiple Performing Activities	374 387	7 414	430	ŭ	Contg	Contg
Government Furnished Property: N/A						
TOTAL PROJECT	374 387	7 414	430			
Page 18 of	of 18					

RDTGE 1	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Joint/Defo	R-1 ITEM NOMENCLATURE Joint/Defense Informatio 0302019K	TURE Mation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Total Program Element (PE) Cost	3.622	4.468	4.721	4.971	5.404	5.858	5.984	6.123	Contg	Contg
Defense-Wide C3 Architecture & Planning/T62	1.200	1.373	1.464	1.542	1.707	1.873	1.912	1.957	Contg	Contg
Theater C3 Technical Integration/T63	.447	*0	0	0	0	0	0	0	Contg	Contg
Technology Advancement/A19	.349	.361	.366	.360	.375	.390	.399	.407	Contg	Contg
Special Projects/T64	1.100	1.114	1.200	1.246	1.386	1.531	1.564	1.601	Contg	Contg
CINCUSACOM Support/T65	.526	*0	0	0	0	0	0	0	Contg	Contg
CINC/JTF C4 Integration/T66	*0	1.620	1.691	1.823	1.936	2.064	2.109	2.158	Contg	Contg
Night Or Document of Dudget Item Tiether	- + - + O = = = = = = = = = = = = = = = = = =	Tree to the first	***							

. Mission Description & Budget Item Justification:

These support in the above mentioned activities is provided to the Office of the Secretary of Defense (OSD), the Joint Staff This program provides overall system analysis, architectural development, system engineering, integration, and developmental engineering responsibilities for joint and national level Command, Control, and Communications (C3) activities involve joint/national level systems which necessitate a high degree of multi-service/agency planning and development. Included are technical support and engineering integration to facilitate compliance with standards and guidance backed by analysis and data to support OSD, the JS, and the CINCs in prioritizing their Command and Control Technical The program element develops planning This program element is under Budget Activity 07 because it involves efforts systems to ensure the affected systems continue to be responsive in current, dynamically changing environments. technical architectures and to improve the command centers of the Unified and Specified (U&S) Commands. (JS), U&S Commands (CINCs), the Military Departments and Defense Agencies. supporting operational systems development. (C2) requirements and acquisitions.

*Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

Page 1 of 25

RDTGE F	BUDGET IT	RDTEE BUDGET ITEM JUSTIF	ICATION (ICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Informatio 0302019K	rure ation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	itegration
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Defense-Wide C3 Architecture & Planning/T62	1.200	1.373	1.464	1.542	1.707	1.873	1.912	1.957 Contg	Contg	Contg

. Mission Description & Budget Item Justification:

products depict how all DOD systems, to include information, sensors, data storage services, and communications networks <u>a</u> simulation of the DII; (c) The Defense Information Systems Network (DISN) which addresses the fixed common-user systems, treating the long haul communications, base-level, and rear-area tactical communications as an end-to-end system with particular focus on user requirements, technology and standards, features and services, security, and network managenetworks, and computer storage devices to provide collection, processing, storage, display and information transfer; Information Infrastructure (NII). This project gives DOD overall improved operational performance and reduced costs DII Technology Insertion, which provides assessment of the utility of new technology through high level performance Infrastructure (DII), which integrates all DOD information systems, sensors, data storage services, communications This project encompasses two efforts: (1) The first effort provides the interoperability and integration of provide collection, processing, storage, display and information transfer. It incorporates the DII and National This is accomplished through a multi-level planning program which includes four elements: (a) The Defense Information accomplished through the development of enterprise, mission, functional and technical architecture products. ment; (d) the DISN Security which includes current and future DISN security initiatives for communications. second effort provides planning for interoperability and integration of C41 for the Warrior (C41FTW). This resources essential to the achievement of a Global C4I Infrastructure that will be "seamless" to the user. through common architecture standards and interfaces, and a sharing of assets and capabilities.

(U) FY 1996 Accomplishments:

- Provide major update of DISN architecture guidance based on FY95 accomplishments together with technology and standards evolution (Sep 96; \$348K).
 - Initiate DISN transition plan in support of Global Grid (Sep 96; \$341K). 0
- Develop tools for legacy DISN networks on object oriented, open COTS system and tools for design/analysis of Asynchronous Transmission Mode (ATM)-based networks on object oriented, open COTS system (Sep 96; \$511K). \$1.200M Total 0

Page 2 of 25

RDTGE I	BUDGET IT	EM JUSTIF	ICATION (RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	TURE nation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K .	tegration
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY 0.1	FY 02	FY03	Cost to	Total
Defense-Wide C3 Architecture & Planning/T62	1.200	1.373	1.464	1.542	1.707	1.873	1.912	1.957 Contg	Contg	Contg

(U) FY 1997 Plans:

- Perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration between the components of DISN, Defense Messaging System (DMS), DII COE, Global Command and Control System (GCCS), Global Combat Support System (GCSS), DII Command and Control (DIIC2) and INFOSEC (Sep 97; \$838K).
 - Develop prototype access line sizing for ATM-based networks and prototype backbone link sizing for ATM-based networks (Sep 97; \$535K). \$1.373M Total 0

(U) FY 1998 Plans:

- Continue to perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration between the components of DISN, DMS, DII COE, GCCS, GCSS, DIIC2 and INFOSEC (Sep 98; \$893K).
- Develop DISA/ARPA Joint Program Office recommended ATM user premises infrastructure design/analysis trade-off capability and develop ATM traffic source characterizations for specific applications (Sep 98; \$571K). \$1.464M Total 0

(U) FY 1999 Plans:

- Continue to perform Horizontal Integration Analysis and develop system engineering guidance for Horizontal Integration between the components of DISN, DMS, DII COE, GCCS, GCSS, DIIC2 and INFOSEC (Sep 99; \$941K).
 - Validate traffic source models for specific ATM applications and develop capability to import operational topology and traffic information from ATM-based networks (Sep 99; \$601K). \$1.542M Total 0

Acquisition Strategy: The MITRE Corporation, McLean, VA; Booz-Allen & Hamilton, Inc., Bethesda, MD;Logicon, Reston, VA.

age 3 of 25

		RDTEE B	SUDGET IT	BUDGET ITEM JUSTIFICATION		(R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPROPRI RDT&E, De.	APPROPRIATION/BUDGET RDT&E, Defense Wide/07	GET ACTIVITY					R-1 ITEM Joint/Defo	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K		Systems Engineering and	ering and In	Integration
SOS	COST (in millions)	lions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Defense-Wide C3 & Planning/T62	fense-Wide C3 A Planning/T62	Architecture	1.200	1.373	1.464	1.542	1.707	1.873	1.912	1.957	Contg	Contg
B. Progre	Program Change Summary:	Summary:										
•		•	į				FY	FY96	FY97	FY98	FY99	
Pre	Previous President Appropriated Value	Frevious President's Budget (FY9/) Appropriated Value	(FY97)			٠	, ,	1.323	1.399	1.470	1.551	11
Adj	justments t	Adjustments to Appropriated Value	l Value				i	-,669	026			
Adj	justments t	Adjustments to Budget Year Since FY97 President's	Since FY9	7 Presiden	t's Budget					006	600	60
Cui	rrent Budge inge Summar	Current Budget Submit/President's Budget Change Summary Explanation:	dent's Bu	dget (FY98)			1.	1.200	1.373	1.464	1.542	12
	FY96 reduc	FY96 reduction due to below threshold reprogramming	elow thres	hold repro	gramming.						-	
	FY98-99 ac	FIST decrease due to congressional adjustment FYS8-99 adjustment due to revised fiscal guida	ngressiona to revised	l adjustme ! fiscal gu	ment to Defer guidance.	to Defense-wide Ir Ince.	nvestment }	Investment Appropriation.	on.			
C. Other N/A	Program Fu	Other Program Funding Summary: N/A										
D. Schedu	Schedule Profile:	** avi										
FY 1996	3rd Qtr:	Develop design tools for legacy	n tools fo		DISN networks	ks.						
FY 1998	sra gtr: 4th Qtr:	bevelop design coois for AlM-bas Develop ATM traffic source chara	n tools re raffic sou	or ATM-base Irce charac	ior Aim-based networks. ource characterizations.	· 10						
FY 1999	4th Qtr:	Develop capability to import ope	ility to i	mport oper	rational topology	pology and		traffic from ATM-based networks	ed network	, B		
					Pa	Page 4 of 2	25					

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	RDTEE		PROGRAM ELEMENT/PROJECT	JECT COST BREAK	T BREAKDOWN	WN (R-3)				DATE: February	у 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	'BUDGET ACT Tide/07	IVITY				R-1 Joint 03020	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engi 0302019K/Defense-Wide C3 Architecture	ENCLATU Informat	RE ion Syst C3 Archi	, n	ering and Integration Planning/T62
A. Project Cost	st Breakdown:	(\$000)									
a. Syst	Systems Engineering	ering			<u>FY96</u> 1,200	<u>FY96</u> 1,200	<u>FY97</u> 1,373	izaje≓	FY98 1,464	<u>FY99</u> 1,542	
TOTAL					1,:	1,200	1,373		1,464	1,542	
B. <u>Budget Acq</u> i Support	uisition H. and Manager	Budget Acquisition History and Planning Support and Management Organizations		Information:	: uc						
Contractor or C Government M Performing o	Contract Method/Type or Funding <u>Vehicle</u>	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to	Budget <u>FY96</u>	Budget FY97	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	Total <u>Program</u>
Multiple C Performing C Activities M	CPAF CPFF MIPR					1,200	1,373	1,464	1,542	Contg	Contg
Government Furnished Property: N/A	shed Propert	y: N/A									
TOTAL PROJECT						1,200	1,373	1,464	1,542		
					Page 5 of	f 25					

RDTGE	BUDGET IT	EM JUSTIF	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe.	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	TURE	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Theater C3 Technical Integration/T63	.447	*0	0	0	0	0	0	0	0 contg	Contg

Mission Description & Budget Item Justification:

concepts, evolving architectures and standards into the theater commands, thus contributing to the achievement of global concept. The project provides support directly to the warfighting and supporting CINCs to overcome deficiencies in the interface and management between tactical and strategic as well as tactical-to-tactical switched systems and to provide C3 capabilities that contribute to mission accomplishment. This project supports DISA's designated responsibilities as oriented; the recommendations are developed in coordination with the warfighting planners. This project provides the technical guidance to CINC and Service C4I system development to ensure that both CINC and Service programs incorporate the technical integrator for tactical to DISN switched systems and as the integrator for all DOD communications network This project provides technical engineering support to ensure technical integration of tactical switched systems deficiencies which have significant operational impacts. This support is near-term, externally focused and user and associated network management into the Strategic Network in a seamless architecture that supports the C4IFTW management systems. In addition, it provides a method to inject Corporate Information Management (CIM), and DII C3I infrastructure. USCENTCOM, USEUCOM, USPACOM, and USSOUTHCOM depend on this project to correct existing G3 and are consistent with the DISN Goal Architecture and C4IFTW guidance.

(U) FY 1996 Accomplishments:

- Provide engineering for Joint Communications Planning and Management System (JCPMS) Planning and Management Support (Sep 96; \$223K).
- Tactical Communications Architecture, provide technical support for the Joint Task Force (JTF) interoperability work, and assist with solving JTF interoperability problems referred to DISA for resolution (sep 96; \$224K). Develop architecture documentation and provide support necessary for implementation of the Joint Task Force 0

*Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

Page 6 of 25

RDTGE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Def 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	rure ation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96 .	FY 97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Theater C3 Technical Integration/T63	.447	*0	0	0	0	0	0	0	0 Contg	Contg

Acquisition Strategy: Booz-Allen & Hamilton, Inc., Bethesda, MD; The MITRE Corporation, McLean, VA; Logicon Eagle Technology, Reston, VA and Winter Park, FL.

B. Program Change Summary

Program Change Summary:				
	FY 96	FY 97	FY98	FY99
Previous President's Budget (FY97)	.447	0	0	0
Appropriated Value	.927			
Adjustments to Appropriated Value	480			
Adjustments to Budget Year Since FY97 President's Budget				-
Current Budget Submit/President's Budget (FY98)	.447	*0	0	0
Change Summary Explanation:				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•			

FY96 reduction due to Congressional adjustments of Defense-Wide Investment appropriation and below threshold reprogramming.

*In FY97, funding for this project was combined with Project T65 in a new project, T66.

C. Other Program Funding Summary:

Total Cost	Contg
FY96	.027
	n and Maintenance:
	Operation and

Related RDT&E: Other projects in PE #0302019K.

Page 7 of 25

RDTGE 1	RDIGE BUDGET ITEM JUSTIF	EM JUSTIF	ICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1997	_
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	TURE nation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02 .	FY03	Cost to Complete	Total Cost
Theater C3 Technical Integration/T63	.447	*0	0	0	0	0	0	0	0 Contg	Contg

D. Schedule Profile:

FY 1996 1st Otr: Limited Testing and Evaluation of Joint Integrated Tactical Switch (JITS) prototypes. 2nd Qtr: JITS Milestone III Review.

Initial Fielding of Joint Communications Network Management Tool.

3rd Qtr: Issue RFP for JITS.

Fielding/Retrofit of Circuit Switch Routing Task Execution Plan.

	RDT6	RDIGE PROGRAM ELEMENT/PROJ	ELEMENT/PRO	TECT COST	T BREAKDOWN	WN (R-3)				DATE: February	y 1997
APPROPRIATION/BUDGET RDT&E, Defense Wide/07	N/BUDGET ACT Wide/07	ACTIVITY			·	R-1 : Joint 03020	R-1 ITEM NOMENC Joint/Defense Inf 0302019K/Theater	C3	RE ion Syste chnical I	TURE nation Systems Engineering Technical Integration/T63	and Integration
A. Project (Cost Breakdown: (\$000)	(000\$) : <u>um</u>				FY96		FY97	FY 98	80 >4	σ
Project	Project Cost Categories a. Systems Engin	st Categories Systems Engineering				447		* 0	0		ol.
TOTAL						447		*0	0	0	
B. <u>Budget Ac</u> Support	Budget Acquisition History and Planning Information: Support and Management Organizations	istory and ment Organi	<u>Planning Ir</u> zations	formatio	: <u>u</u> c						
Contractor or Government Performing	Contract Method/Type or Funding	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to EY96	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	Total Program
Multiple Performing Activities	CPAF CPFF MIPR					447	0	0	0	*	*
Government Furnished Property: N/A TOTAL PROJECT	nished Propert	:y: N/A				447	0	0	0		
*Beginning FY 1997, Projects T63	1997, Projects	3 T63 and T65	are combined	into	a new project, "CINC/JTF C4	t, "CINC,		Integration",	on", T66.		
					Page 9 of	£ 25					

UNCLASSIFIED

RDTGE	BUDGET IT	EM JUSTIF	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1997	,
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				•	R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	TURE	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	ıtegration
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY 0.3	Cost to Complete	Total Cost
Technology Advancement/A19	.349	.361	.366	.360	.375	390	.399	.407	.407 Contg	Contg

Mission Description & Budget Item Justification:

The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly project forces provided accentuates the decision making process in new acquisitions, assessments of doctrine and design of operational support the acquisition, testing, and assessing of operational activities in support of OSD. The model supports these anywhere in the world. This project is to build a DOD-wide High Level Architecture (HLA) C4ISR Model Federation to taskings by providing C4ISR quantitative analysis as measured against mission success. The quantitative analysis activities

(U) FY 1996 Accomplishments:

o Development of an initial prototype C4ISR model. (3rd Qtr - 4th Qtr) (\$.349M Total)

(U) FY 1997 Plans:

o Initial integration with theater level force deployment models and analytical support for Vision 2000 (1st Qtr - 3rd Qtr) (\$.361M Total) objectives.

(U) FY 1998 Plans:

o Full integration with theater level force deployment models. (1st Qtr - 3rd Qtr) (\$.366M Total)

(U) FY 1999 Plans:

(1st Qtr - 3rd Qtr) (\$.360M Total) Full integration for DISA CINC assessments.

Page 10 of 25

RDTGE	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	ITEM NOMENCLATURE t/Defense Informatio 019K	rure ation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Technology Advancement/A19	.349	.361	.366	.360	.375	.390	.399	.407	Contg	Contg
B. Program Change Summary:					EY	<u>FY96</u>	FY 97	FY98	EY99	5
Previous President's Budget (FY97)	dget (FY9	(7)			•	.349	.361	.367	.362	01
Appropriated Value	•				•	.479	.361			
Adjustments to Appropriated Value	ated Valu	o			i	130	0			
Adjustments to Budget Year Since FY97 Pr	ear Since	FY97 Pre	esident's	Budget				001	002	61
Current Budget Submit/President's Budget	resident'	s Budget	(FY 98)		•	.349	.361	.366	.360	
Change Summary Explanation: FY96 reduction due to Congressional adjureprogramming. FY98 and FY99 changes due to revised fis	ion: ongressio ue to rev	nal adjus ised fisc	stment of Def cal guidance.	stment of Defense-wide cal guidance.		Investment app	appropriation		and below threshold	p

Other Program Funding Summary: N/A

Page 11 of 25

### Note		RDTGE E	BUDGET IT	ITEM JUSTIF	ICATION	(R-2 Exhibit)	Exhibit)			DATE: Fel	February 1997	
COST (in millions)	APPROPRIATION/BUDGET RDT&E, Defense Wide/07						R-1 ITEM Joint/Defe 0302019K	NOMENCLA:		ems Engine	Systems Engineering and Integration	tegration
Schedule Profile: Fiscal Year actual and planned events by quarter. 1996 3rd Qtr: Execute option year of technical support contract 1997 1st Qtr: Execute option year of technical support contract 1998 1st Qtr: Execute option year of technical support contract 1999 1st Qtr: Execute option year of technical support contract 1999 1st Qtr: Execute option year of technical support contract	COST (in millio	ns)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total
Schedule Profile: Fiscal Year actual and planned events by quarter. 1996 3rd Qtr: Execute option year of technical support 1997 1st Qtr: Execute option year of technical support 1998 1st Qtr: Execute option year of technical support 1999 1st Qtr: Execute option year of technical support	Technology Advanceme	nt/A19	.349	.361	998.	.360	.375	390	.399	.407	Contg	Contg
1996 3rd Qtr: Execute option year of technical support 1997 1st Qtr: Execute option year of technical support 1998 1st Qtr: Execute option year of technical support 1999 1st Qtr: Execute option year of technical support	Schedule Profi Fiscal Year	ual	olanned e		quarter.							
1997 1st Qtr: Execute option year of technical support 1998 1st Qtr: Execute option year of technical support 1999 1st Qtr: Execute option year of technical support	1996 3rd Qtr:		year		cal		ıct					
1998 1st Qtr: Execute option year of technical support 1999 1st Qtr: Execute option year of technical support	1997 1st Qtr:				cal		ıct		, , , , , , , , , , , , , , , , , , ,			
1999 1st Qtr: Execute option year of technical support	1998 1st Qtr:				cal		ıct					
	1999	ecute opti	ion year	of techni	cal		ıct				-	
Page 12 of 25					Pac	12 of	25					

	RDTLE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)	R-3)	DATE:	DATE: February 1997
AP)	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NC Joint/Defens 0302019K/Tec	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering 0302019K/Technology Advancement/A19	ystems Eng ment/A19	ineering and Integration
A.	Project Cost Breakdown: (\$000) .				
	Project Cost Categories	<u>FY96</u>	FY 97	FY98	FY99
	a. System analysis, design and programming	349	361	366	360
	TOTAL	349	361	366	360
m m	Budget Acquisition History and Planning Information N/A				
					-
	((ı			
	rage 13 of 2	67			

RDTGE 3	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	FURE lation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY 97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Special Projects/T64	1.100	1.100 1.114	1.200	1.200 1.246	1.386	1.531	1.564	1.601 Contg	Contg	Contg
The state of the s	11.47	To - 4 2 6 2								

Mission Description & Budget Item Justification:

Therefore, information on this project is All aspects of this project are classified and require special access. not contained in this document but can be obtained upon request.

. Program Change Summary:

	FY96	EY 97	FY98	FY99
Previous President's Budget (FY97)	1.100	1.155	1.205	1.253
Appropriated Value	1.412	1.155		
Adjustments to Appropriated Value	312	041		
Adjustments to Budget Year Since FY97 President's Budget			005	007
Current Budget Submit/President's Budget (FY98)	1.100	1.114	1.200	1.246
Change Summary Explanation:				

FY96 reduction due to Congressional adjustment of Defense-wide Investment Appropriation and below threshold reprogramming.

FY97 decrease due to Congressional adjustment of Defense-wide Investment Appropriation. FY98-99 adjustment due to revised fiscal guidance.

C. Other Program Funding Summary:

PE 0303131K, Minimum Essential Emergency Communications Network (MEECN). Related RDT&E:

. Schedule Profile:

Information will be made available upon request.

Page 14 of 25

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 A. Project Cost Breakdown: (\$000) Project Cost Categories a. Systems Engineering TOTAL B. Budget Acquisition History and Planning Informa Support and Management Organizations Contractor or Contract Government Method/Type Award or Performing Proje Performing or Funding Obligation Activity Offic Activity MITRE SS/CPFF Government Furnished Property: N/A TOTAL PROJECT	RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)		DATE:	February 1997	
Cost Breakdown: (\$000) tt Cost Categories a. Systems Engineering Coutract Method/Type Award or Performing or Funding Obligation Activity Vehicle Date EAC SS/CPFF rnished Property: N/A	ACTIVITY	R-1 ITEM NON Joint/Defense 0302019K/Spec	R-1 ITEM NOMENCLATURE Joint/Defense Information Sys 0302019K/Special Projects/T64	/stems Eng	Systems Engineering and Integration	Integration
a. Systems Engineering Acquisition History and Planning In tt and Management Organizations Contract Method/Type Award or Performing or Funding Obligation Activity Vehicle Date EAC SS/CPFF rnished Property: N/A	Breakdown: (\$000)	FY 9 6	FY97	FY98	FY99	
Acquisition History and Planning In the and Management Organizations Contract Method/Type Award or Performing or Funding Obligation Activity Vehicle Date EAC SS/CPFF rnished Property: N/A	eering	1,100	1,114	1,200	1,246	
Acquisition History and Planning In the and Management Organizations Contract Method/Type Award or Performing or Funding Obligation Activity Vehicle Date EAC SS/CPFF rnished Property: N/A		1,100	1,114	1,200	1,246	
Contract Method/Type Award or Performing or Funding Obligation Activity Vehicle Date EAC SS/CPFF rnished Property: N/A	sition History and Planning Information d Management Organizations					
MITRE SS/CPFF Government Furnished Property: N/A TOTAL PROJECT	Award or Performing Obligation Activity <u>Date</u> <u>EAC</u>	et Budget E <u>Y97</u>	Budget Budget <u>FY98</u> <u>FY99</u>	-	Budget to Tol Complete Pr	Total P <u>rogra</u> m
Government Furnished Property: N/A TOTAL PROJECT	1,100 1,100	0 1,114	1,200 1,246		Contg Co	Contg
TOTAL PROJECT	ed Property: N/A					
	1,100	0 1,114	1,200 1,246			
	Page 15 of 25					

RDTGE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	EM JUSTIF	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	_
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	,				R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	TURE mation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINCUSACOM Support/T65	.526	*0	0	0	0	0	0	0	0 Contg	Contg
Mission Description f Dublic Tron Tiltification	Idot Ttom	Tuckifion	+ + 0 = .							

Mission Description & Budget Item Justification

serve as a model for them. Therefore, this project's outputs not only contain the only C4 planning done for specific operational missions but they will also contain key portions of the C4 planning for support to all CINCs' operational Because of this, USACOM's C4 planning encompasses missions much broader than other unified commands and will CINCUSACOM, identifies shortcomings in C4 systems and procedures and, when appropriate, prototype solutions to those responsibility for joint training, joint force packaging, UN peacekeeping support and the land defense of CONUS and Implementation of this project will, therefore, provide global benefits for all the nation's security This project develops the near and mid-term Command, Control, Communications and Computer (C4) plans for shortcomings. The CJCS Unified Command Plan significantly increased ACOM's missions, giving the command the objectives missions.

(U) FY 1996 Accomplishments:

- Supported USACOM's production of their FY96 C4 Strategic Master Plan (C4SMP) Assessment Update (Sep 96; \$240K).
 - Prototyped solutions to USACOM's C4 deficiencies with global impact and collect data on ACOM's operational use to expedite standardized solution development (Aug 96; \$286K). \$.526M Total

Acquisition Strategy: Logicon Eagle Technology, Inc., Winter Park, FL.

*Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

Page 16 of 25

	RDIGE B	BUDGET IT	ITEM JUSTIF	FICATION (R-	(R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPRC RDT&E	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K		ems Engine	Systems Engineering and Integration	tegration
	COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINCL	CINCUSACOM Support/T65	.526	*0	0	0	0	0	0	0	Contg	Contg
В.	inge Summary:	1	·			EY	FY 9 6	FY97	EY98	EY99	6
	Previous Fresident's Bud Appropriated Value	Buager (FY97)	(• • .	.526	*	0	0	,
	Adjustments to Appropriated value Adjustments to Budget Year Since	ed valuar Since	FY97	President's	Budget	.	+.075				
	<pre>Current Budget Submit/President's Budget Change Summary Explanation: FY96 adjustment due to below threshol</pre>	esident' on: o below	s Budget threshold	(FY98) d reprogramming	mming.	•	.526	* 0	0	0	
اہ ن	Other Program Funding Summary:	ary:									
· · · · · ·	Operations and Maintenance	9 0				EY.	<u>FY96</u> .665				
D.	<u>Schedule Profile</u> :										
FY 19	1996 1st Qtr: Place tasks 3rd Qtr: Delivery of 4th Qtr: Delivery sol	ks on contract of FY96 C4 Assessme solution recommenda	on contract FY96 C4 Assessment ution recommendati	uo	for ACOM evaluation	ation					
*Begi	*Beginning FY 1997, Projects T	T63 and T65	are	combined into	ಹ	new project,	"CINC/JTF	C4	Integration",	T66.	
				Page	17 of	25					

RDTGE		PROGRAM ELEMENT/PROJECT	JECT COST	ECT COST BREAKDOWN	(R-	3)		Δ	DATE: February	у 1997
APPROPRIATION/BUDGET ACT RDT&E, Defense Wide/07	ACTIVITY				R-1 Joint 03020	ITEM NO	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K/CINCUSACOM/T65		Systems Engineering	and Integration
A. <u>Project Cost Breakdown</u> : (Project Cost Categories	<u>own</u> : (\$000) yories				FY 96	101	FY97	FY98	3 EY99	
a. Systems	Systems Engineering				526		*0	0		
TOTAL					526		*	0	0	
B. <u>Budget Acquisition History and Planning Information</u> Support and Management Organizations	History and F ement Organiz	<u>lanning In</u> ations	.formati	uc						
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to FY96	Budget <u>FY96</u>	Budget <u>EY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	Total Program
LOGICON C/CPAF					526	*0	0	0	*	+
Government Furnished Property: N/A TOTAL PROJECT	ty: N/A				526	*0	0	0		
*Beginning FY 1997, Projects T63	and T65	are combined	into	a new project, "CINC/JTF C4	t, "CINC,		Integration",	on", T66.		
				Page 18 o	of 25					

RDIGE E	BUDGET IT	RDTGE BUDGET ITEM JUSTIF	FICATION (R-2 Exhibit)	R-2 Exhib	it)		<u> </u>	ATE: Fel	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Informatio 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	s Engine	ering and In	tegration
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	0	0 1.620*	1.691	1.823	1.691 1.823 1.936	2.064	2.109	2.158 Contg	Contg	Contg

Mission Description & Budget Item Justification:

The Chairman, Joint Chiefs of Staff Instruction (CJCSI) 6111.01, C4 Planning, Assessment, and Evaluation Process, Report, and the Joint Warfighter Capabilities Assessment (JWCA). The process advocates documentation of short, middle, architectures, modifying existing systems, and assessing short and long range C4 capabilities or deficiencies. It is the basis for CINC C4 inputs to the JSPS, PPBS, the CINCs Integrated Priority List (IPL), the Joint Monthly Readiness specifically identifies DISA as the responsible agent for providing the following technical and automation support to establishes policy guidelines and assigns responsibilities for modernization planning, analytical assessment, and operational evaluation of C4 systems. It provides general guidance to the CINCs, sub-unified commands, service components, and the Joint Staff for coordinating actions required to field new C4 systems, integrating systems and long range C4 objectives, anticipating future requirements and serving as regional C4 road map. the Joint Staff, J-6, and the CINCs:

- Development and maintenance of automated C4 analysis tools. (1)
- Performing C4 studies or analysis in support of the CINCs or Joint Staff. (2)
- Providing a secure electronic repository for C4 planning, assessment, and evaluation documents. (3)

(U) FY 1997 Plans:

This task also Transition Road Map (TRM) Support to USSOUTHCOM: This work consists of updating and integrating the USSOUTHCOM involves converting the TRM along with other supporting C4 assessment documentation to Hyper Text Markup Language (HTML) and loading it on to their home page on the SIPRNET. (Contg; \$250K) TRM with C4ISR (Intelligence) issues; in addition to developing the CINC Annual C4 Assessment.

*This project is not a new start.

Page 19 of 25

RDIGE B	UDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	NOMENCLA:	FURE Nation Syste	ms Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
E										
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02 .	FY03	Cost to	Total
									רסווולדוברב	COSC
CINC/JTF C4 Integration/T66	0	0 1.620*	1.691	1.823		2.064	1.936 2.064 2.109	2.158 Conta	Conta	Conta

(U) FY 1997 Plans (cont'd):

- converted to HTML and loaded on to a home page on the SIPRNET with supporting C4 related documentation. (Contg; This work consists of developing the FY97 USACOM C4 Planning, along with the CINC Annual C4 Assessment. Both documents will be C4I Assessment and Planning Support to USACOM: Assessment, and Evaluation Master Plan,
- Assessment, converting it to HTML, and loading it on to a home page on the SIPRNET with supporting C4 related C4I Assessment and Planning Support to USSOCOM: This work consists of developing the CINC Annual C4 documentation. (Contg; \$375K) 0
- C4 PA&E Automation Support: The objective of this task is to design, implement, and maintain CINC and Joint Staff home pages over the INTERNET World Wide Web. This task is inherent to supporting all CINCs and the Joint staff and associated costs are already included in the aforementioned tasks. (Contg; \$270K) o
- C4 Assessment Tool: This task involves development of an automated C4 assessment tool consisting of a database capabilities for CINC USSOUTHCOM, USACOM, and USSOCOM. This criteria will be extracted from documents such as populated with criteria that serve as a strategic foundation for the development of warfighter objectives and Lessons Learned System (JULLS), and JWCA issues. The CINCs will have the ability to weigh the relative value of each individual criteria, based on their mission and functions, producing a rank order listing of their C4 would provide a uniform methodology across all the CINCs and tie the C4 PA&E process into the overall theater architecture through an automated means. The tool would run over the SIPRNET. (Contg. \$350K) capabilities or deficiencies which they can incorporate into their JWCA submission to the Joint Staff. It the Joint Monthly Readiness Report (JMRR), IPL, Joint Mission Essential Task List (JMETL), Joint Universal \$1.620M Total o

*This project is not a new start.

RDTGE F	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K	rure ation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY01	FY 02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	0	0 1.620*	1.691	1.823	1.936	1.691 1.823 1.936 2.064 2.109 2.158 Contg	2.109	2.158		Contg

(U) FY 1998 Plans:

C4I Assessment and Planning Support to Joint Staff and Unified CINCs: This work consists of developing the FY98 C4 Planning, Assessment, and Evaluation Master Plan for all CINCs in addition to development of their CINC Annual C4 Assessment. These deliverables will be converted to Hyper Text Markup Language (HTML) and loaded on to CINC home pages on the SIPRNET with supporting C4 related documentation. Support to the Joint Staff will be closely similar. (Contg; \$1691K) \$1.691M Total

(U) FY 1999 Plans:

C4I Assessment and Planning Support to Joint Staff and Unified CINCs: This work consists of developing the FY99 Annual C4 Assessment. These deliverables will be converted to Hyper Text Markup Language (HTML) and loaded on to CINC home pages on the SIPRNET with supporting C4 related documentation. Support to the Joint Staff will be C4 Planning, Assessment, and Evaluation Master Plan for all CINCs in addition to development of their CINC closely similar. (Contg; \$1823K) \$1.823M Total

Acquisition Strategy: N/A

*This project is not a new start.

Page 21 of 25

RDTGE	BUDGET I	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	X				R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Informatic 0302019K	TURE Mation Syst	ems Engine	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration 0302019K	tegration
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF C4 Integration/T66	0	1.620*	1.691	1.823	1.936	2.064	2.109	2.158	Contg	Contg
B. Program Change Summary:										
					Y.	FY96	FY97*	FY98	FY99	61
Previous President's Budget (FY97)	idget (FY	97)			0		1.679	1.698	1.833	33
Appropriated Value							1.679			
Adjustments to Appropriated Value	iated Valu	ne					059			
Adjustments to Budget Year Since FY97 President's	Tear Since	e FY97 Pre	sident's	Budget				007	010	10
Current Budget Submit/President's Budget	President'	's Budget	(FY98)		0		1.620	1.691		23
Change Summary Explanation:	cion:									
FY97 decrease due to Congressional adjustment to Defense-Wide Investment Appropriation.	Congres	sional adj	ustment t	o Defense	-Wide Inv	restment A	\ppropriat	ion.		
FY98 and FY99 decrease due to revised	ase due to	o revised	fiscal guidance.	idance.					-	
Other Drogram Finding Simmers:										

C. Other Program Funding Summary:

N/A

Page 22 of 25

*This project is not a new start.

		RDTEE BUDGET		ITEM JUSTIF	FICATION (1	(R-2 Exhibit)	it)			DATE: Fe	February 1997	1
APPROPR RDT&E, De	APPROPRIATION/BUDGET RDT&E, Defense Wide/07	GET ACTIVITY					R-1 ITEM Joint/Defe 0302019K	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K		Systems Engineering	ering and In	and Integration
CO	COST (in millions)	lions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
CINC/JTF	C4	Integration/T66	0	1.620*	1.691	1.823	1.936	2.064	2.109	2.158	Contg	Contg
D. Sche	Schedule Profile:	: <u>1e</u> :										
FY1997	1st Qtr: 2nd Qtr:	1st Draft of SOUTHCOM TRM 1st Draft of ACOM C4 PA&E Ma	of SOUTHC	SOUTHCOM TRM ACOM C4 PA&E Ma	aster Plan							
		1st Draft of	of SOCOM	SOCOM C4 PA&E M	ч	Ľ						
		C4PA&E Automation Support	omation S	upport								
		Final Draft of SOUTHCOM TRM Dreliminary design of the C	c or sour	HCOM TRM	1 C C C C C C C C C C C C C C C C C C C	+ +			,			
	3rd Qtr:	C4 PA&E Automation Support	comation)								
		Complete development of the	evelopmen	a)	C4 Assess	Assessment Tool			•		•	
	4th Qtr:	C4 PA&E Automation Support	tomation	Support								
		Complete development of the	evelopmen	f the	C4 Assessment	ment Tool						
		CINC C4 Annual Summary	nual Summ	ıary								
FY1998	1st Qtr:	1st Draft of each CINCs C4	of each C	_	PA&E Plan							
		C4 PA&E Automation Support	comation	Support								
		C4 Assessme	Assessment Tool O&M	О&М								
	2nd Qtr:	Final Draft of each CINCs	of each	CINCS C4	PA&E Plan	c						
		C4 PA&E Aut	PA&E Automation	Support								
		C4 Assessme	Assessment Tool	О&М								
	3rd Qtr:	C4 PA&E Aut	PA&E Automation	Support								
		C4 Assessme	Assessment Tool	O&M								
					DAG.	23 of	25					
					75.4	70 07						

APPROPRIATION/BUDGET	🗸	NUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION		(R-2 Exhibit)	vit)			DATE: Fe	February 1997	
RDT&E, Defense Wide/07	07					K-1 LIEM Joint/Defe 0302019K	K-1 liem NOMENCLAIURE Joint/Defense Information 0302019K	roke lation Syst	Systems Engineering		and Integration
COST (in millions)	lions)	FY96	FY97	FY98	FY99	FY00	FY01	FY 02	FY 03	Cost to Complete	Total Cost
CINC/JTF C4 Integr	Integration/T66	0	1.620*	1.691	1.823	1.936	2.064	2.109	2.158	Contg	Contg
4th Qtr:	C4 PA&E Automation Support C4 Assessment Tool O&M CINC C4 Annual Summary	comation Supent Tool O&M	Support O&M ary								
1999 1st Qtr: 2nd Qtr: 3rd Qtr: 4th Qtr:	1st Draft of each CINCs C4 C4 PA&E Automation Support C4 Assessment Tool O&M Final Draft of each CINCs C4 PA&E Automation Support C4 Assessment Tool O&M C4 PA&E Automation Support C4 Assessment Tool O&M C4 PA&E Automation Support C4 PA&E Automation Support C4 PA&E Automation Support C4 Assessment Tool O&M C1 C4 Assessment Tool O&M C1NC C4 Annual Summary	Draft of each C PA&E Automation Assessment Tool al Draft of each PA&E Automation Assessment Tool PA&E Automation Assessment Tool Assessment Tool C C4 Annual Summa	s C4 Port Port Port	PAKE Plan 4 PAKE Plan	c					•	
				Page	24 of	25					

1	RDIEE PROGRAM E	PROGRAM ELEMENT/PROJECT		COST BREAKDOWN	WN (R-3)			Δ	DATE: February	ry 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ACTIVITY				R-1 : Joint 03020	ITEM NOR /Defense 19K/CINC	R-1 ITEM NOMENCLATURE Joint/Defense Information 0302019K/CINC/JTF C4 Integ	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En 0302019K/CINC/JTF C4 Integration/T66	us Engineering /T66	Systems Engineering and Integration gration/T66
A. <u>Project Cost Breakdown</u> : (Project Cost Categories	ikdown: (\$000)				FY96		FY 97	FY98	3 <u>EX99</u>	6
a. Syste	Systems Engineering				0		1,620	1, 691	1, 823	23
TOTAL					0		1,620	1, 691	1, 823	23
B. Budget Acquisition History and Planning Ins Support and Management Organizations	on History and lagement Organi	Planning Ir zations	ıformation:	: <mark>u</mark> c						
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle	ype Award or ng Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>FAC</u>	Prior to	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	rotal Program
Multiple CPAF Performing CPFF Activities MIPR					0	1,620	1,691	1,823	Contg	Contg
Government Furnished Property: N/A	perty: N/A									
TOTAL PROJECT					0	1,620	1,691	1,823		
				Page 25 of	f 25		:			

RDTGE	BUDGET I1	RDIGE BUDGET ITEM JUSTIF	ICATION	(R-2 Exhibit)	oit)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	. ITEM NOMENCLATURE 0303126K/Long Haul		Communications	w	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Total PE Cost: PE 0303126K	17.788	22.479	14.520	15.254	8.746	9.047	9.241	9.457	Contg	Contg
Commercial Satellite Communications Init./E25	7.254	7.464	0	0	0	0	0	0	0	44.718
Leading Edge Pilot Info. Technologies/E26	2.044	2.854	3.060	3.114	3.222	3,335	3.519	3.597	Contg	Contg
MILSATCOM & DII Planning/E61	4.329	4.211	4.797	4.883	5.053	5.227	5.226	5.353	Contg	Contg
Defense Info. Systems Network Acquisition/H20	1.131	7.496	6.200	6.800	0	0	0	0	0	21.627
Defense Message System/H80	2.584	*	0	0	0	0		0	Contg	Contg
White House Situation Support Staff/W90	0.446	0.454	0.463	.0.457	0.471	0.485	0.496	0.507	Contg	Contg

(CINCs), and other critical users. This PE provides for the engineering to consolidate the operational communications communications for the National Command Authorities (NCA), the Joint Chiefs of Staff (JCS), the Commanders-in-Chief networks into DISN and for the technologies, commercial equipments and service offerings to reduce the cost of the evaluation for the Defense Communications System (DCS)/Defense Information Systems Network (DISN) which provides A. Mission Description and Budget Item Justification: This program element funds system engineering and test & Defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime DCS/DISN and to provide valuable new information services to users.

Project E25 develops and implements a commercial satellite communications system pilot responsive communications and information services to support evolving military missions. Project H20 covers DISN, worldwide DOD user and research communities. Project E61 supports the planning and decision management to provide Project E26 supports Leading Edge Pilot Services which include information for program in support of the DISN. The PE consists of 6 projects.

Page 1 of 27

RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 PE 03	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications
architecture and integration activities and service contracts. Project H80 supports the development of the Defense Message System (DMS) which is designed to provide the defense community a more interoperable and cost effective messaging service. Project W90 supports engineering to provide full level crisis management capabilities for the White House. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.	t H80 supports the development of the Defense y a more interoperable and cost effective evel crisis management capabilities for the White volves efforts supporting operational systems

* Project H80 has been transferred to PE 0303129K in FY 1997.

Page 2 of 27

RDTGE 1	BUDGET IT	RDIGE BUDGET ITEM JUSTIF	ICATION	FICATION (R-2 Exhibit)	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)	FY96	FY 97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E25 Commercial Satellite Communications Initiative Follow-On	7.254 7.464	7.464	0	0	0	0	0	0	0	44.718

Mission Description & Budget Item Justification:

communications capabilities. This program establishes a seed pilot network, a tool for networking planning, development available, such as downloading high data rate information from airborne vehicles via commercial satellites to processing of a bandwidth management capability for leased whole transponders, and validation of a concept to reduce DOD commercial (U) This project develops and implements pilot capabilities for a proof of concept using available commercial satellite centers, and dissemination of information to remote users. This program will demonstrate how to integrate commercial satellite capabilities with the Defense Information System Network (DISN) and Defense Satellite Communication's System satellite telecommunications costs by bundling of individual circuit leases and by consolidating telecommunications requirements on whole transponders. The pilot network will offer a variety of services that are presently not

(U) FY 1996 Accomplishments:

- o Continue contracts and extend services to new regions (\$7.254 M)
- o Validate new contracts
- o Expand pilot network services (Ongoing)
- Serve telemedicine, meteorological and ships at sea applications
- o Support Bosnia Peace Keeping

\$7.254M Total

Page 3 of 27

RDTGE	BUDGET 11	RDIGE BUDGET ITEM JUSTIF	ICATION	ICATION (R-2 Exhibit)	oit)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	ν ₀	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Project E25 Commercial Satellite Communications Initiatives Follow-On	7.254	7.464	0	0	0	0	0	0	0	44.718
										1

(U) FY 1997 Plans:

o Expand pilot services (\$7.464 M Ongoing)

o Validate concepts (4097)

-sustainable customer base established, integration with DSCS and DISN, final reports and business plan \$7.464M Total

Acquisition Strategy: All services and equipment are to be competitively procured.

Program Change Summary

	FY 96	FY 97	FY 98	FY 99	Total Cost
Previous President's Budget (FY 1997) 7.263	7.263	7.636	0	0	44 899
Appropriated Value	8.000	7.636		ı)) •
Adjustments to Appropriated Value	746	172			
Adjustments to Budget Year Since FY 1997 President's E	Budget				
Current Budget Submit/President's Budget	7.254	7.464	0	0	44,718
Change Summary Explanation:					•
Finding: FV OF and FVOT medication does be a			•		

Funding: FY 96 and FY97 reduction due to Congressional adjustment to Defense-wide Investment Appropriation.

Page 4 of 27

RDIGE E	SUDGET IT	EM JUSTII	FICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul		Communications	S S	****
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Project E25 Commercial Satellite Communications Initiatives Follow-On	7.254	7.464	0	0	0	0	0	0	0	44.718
Schedule: N/A Technical: N/A						Approximation of the state of t				
C. Other Program Funding Summary: N/A	nary: N/₽									
D. <u>Schedule Profile</u> : Fiscal Year actual and planned events by quarter.	d events	by quarte	er. FV 1007	ŗ.						
1	1 2 3	4	1 2	3 4						
Engineering Milestones: Award VSAT Terminal										
Award transponder and bandwidth contract T&E milestones:	ith contr	act								
Validated Bmc/Control		×								

Page 5 of 27

RDT&E PROGRAM ELEMENT/PROJECT		COST BREAKDOWN	(R-3)		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			R-1 ITEM NOMENCLAT PE 0303126K/Long Haul COMMERCIAL SATELLITE		URE Communications/E25/ COMMUNICATIONS INITIATIVES FOLLOW-ON
A. Project Cost Breakdown (\$000)					
Project cost categories	FY 96	FY 97	FY 98	EX 99	
1. Travel	25	25	0	0	
 management support services Engineering & Technical Services 	300 6,929	300 7,139	00	00	
Total	7,254	7,464	0	0	
B. Budget Acquisition History and Planning Information:		N/A Page 6 of 27			

								DATE: Fe	DATE: February 1997	
RDTGE 1	BUDGET IT	TEM JUSTI	TICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	oit)					
APPROPRIATION/BUDGET ACTIVITY RDIKE, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	ល	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology	2.044 2.854	2.854	3.060	3.114	3.222	3.335	3.519	3.597	Contg	Contg

which are not available from the Defense Information Infrastructure (DII) and for which customers are willing to assume some of the risk This program supports the acquisition and delivery of consolidated advanced technology The DISA funding under this program element will allow the AITS-JPO to information services in a maximally competitive environment (as cost effectively as is possible) to customers with operational needs that exceed those capabilities currently available from the DII. The resulting services will be managed in the operational context of Leading Edge Pilot Services are information transport and value added services communications (voice, data, video, multimedia); and security technologies and applications in command, control, and intelligence for technologies from R&D to widespread experimental uses, to leading edge and from leading edge to maximize the potential for migration the single information DII, operated and maintained by DISA. The DISA/ARPA Advanced Information Technology Services Joint Program Office (AITS-JPO) will integrate advanced technology research and development efforts from ARPA and others, focus the flow of these These services may include information processing, storage, and retrieval; into the DII and the National Information Infrastructure (NII). leverage research and development funding and efforts. Mission Description & Budget Item Justification: associated with development of initial deployment. the worldwide DOD user and research communities.

(U) FY 1996 Accomplishments:

o Monitor candidate information system technologies and capabilities which are still research and development for potential integration into the AITS-JPO Pilot Service portfolio. (\$100K) (1st Qtr - 4th Qtr)

Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge (\$184K) (1st Qtr - 4th Qtr) technology services. 0

Evaluate available candidate Advanced Information Technology (AIT) services versus user requirements and select promising technologies for pilot service. (\$584K) (1st Qtr - 4th Qtr) 0

(\$868K) (1st Qtr - 4th Qtr) Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII. 0

Evaluate and integrate interim call encryption security devices for the modeling and simulation and high performance computing users. Migrate video teleconferencing services to the DII. (\$50K) (1st Qtr - 4th Qtr) o

(\$208K) (1st Qtr - 4th Qtr)

Evaluate Asynchronous Transfer Mode (ATM) multicast services for the modeling and simulation users. (\$50K) (1st Qtr - 4th Qtr) \$2.044M Total

Page 7 of 27

RDT&	E BUDGET 1	TEM JUSTIE	'ICATION (F	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				·	R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	, vo	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to	Total Cost
Project E26 Leading Edge Pilot Information Technology	2.044	2.854	3.060	3,114	3.22	3.335	3.519	3.597	Contg	Contg

FY 1997 Plans:

o Monitor candidate information system technologies and capabilities which are still in research and development for potential integration into the AITS-JPO Pilot Service portfolio (\$100K) (1st Qtr - 4th Qtr)

o Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge (\$100K) (1st Qtr - 4th Qtr) technology services.

o Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (\$700K) (1st Qtr - 4th Qtr)

Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII. (\$950K) (1st Qtr - 4th Qtr) o

Migrate selected modeling and simulation services to the DII. (\$400K) (1st Qtr - 4th Qtr) 0

Integrate first production key agile cell encryption devices for modeling and simulation users (\$239K) (1st Qtr - 2nd Qtr) 0

Enhance emerging band width-aware and end-to-end security pilot services (\$155K) (1st Qtr - 4th Qtr). 0

Integrate ATM multicast services for modeling and simulation users (\$200K) (1st Qtr - 4th Qtr) \$2.854M Total

(U) FY 1998 Plans:

Develop and implement emerging technologies in order to identify potential candidates to migrate into advanced DOD-wide applications and services. (\$1,060K) (1st Qtr - 4th Qtr) 0

Evaluate and implement emerging standards and protocols into pilot services network (\$1,000K) (1st Qtr - 4th Qtr) 0

(\$1,000K) (1st Qtr - 4th Qtr) Develop and coordinate plans and strategies for migration of leading edge services to the DII. \$3.060M Total

(U) FY 1999 Plans:

o Perform program and engineering analysis of candidate leading edge information technologies test of pilot operations and demonstrations of leading edge technologies for migration into the DII. (1st Qtr - 4th Qtr) \$3.114M Total

Page 8 of 27

	RDTGE	BUDGET I	TEM JUSTIF	CATION (R	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				DATE: Feb.	February 1997	
A B B	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	ITEM NOMENCLATURE 0303126K/Long Haul	ľ	Communications	v	
	COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02 ·	FY03	Cost to Complete	Total Cost
Pr Pi	Project E26 Leading Edge Pilot Information Technology	2.044	2.854	3.060	3.114	3.222	3.335	3.519	3.597	Contg	Contg
ACC	Acquisition Strategy: Develop and implement statemen	implemen	t statemen	its of work	and task	orders to s	support FFRDC	UC and SETA	A Contracts.	• 6	
m.	Program Change Summary			(F)	FY96	FY	FY97	Y	FY98	FY99	•
	Previous President's Budget (FY 1997)	Y 1997)		2.	2.873	3.	3.029	۳ س	3.139	3.260	50
	Appropriated Value Adjustments to Appropriated Value	lue		2.	2.971 927	ë i	3.029				
	Adjustments to Budget Year Since FY97		President's	Budget				i	079	146	16
	Current Budget Submit/President's Budget (FY 1998) Change Summary Explanation:	t's Budge	t (FY 1998		2.044	2.	2.854	÷.	3.060	3.114	14
	Funding: FY96 and FY97 FY98 and FY99	reduction changes a	on due to Co are due to	ongressional adj revised fiscal	and FY97 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. and FY99 changes are due to revised fiscal guidance.	nt to Defer	nse-wide In	ovestment A	Appropriati	on.	
	Schedule: N/A Technical: N/A										
ບ່	Other Program Funding Summary:				<u>FY96</u> 2.355		<u>FY97</u> 2.658		<u>FY98</u> 2.736		<u>FY99</u> 2.856
Ü.	Schedule Profile Fiscal Year actual and planned events by quarter.	events b	y quarter.		į		į		i		,
	SOW for SETA Support				1 2 3 X	4	1 2 3 X X X	4	FY98 123 XXX	4 1 2 3 X X	ω × 4.
				<u> </u>	Page 9 of 27	7					
				-							

UNCLASSIFIED

RDIGE PROGRAM ELEMENT/PROJECT	JECT COST BR	COST BREAKDOWN	(R-3)	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Pilot Info Tech	Communications/E26 Leading Edge
A: Project Cost Breakdown	FY96	FY97	<u>EY98</u>	FY99
Project Cost Categories				
Modeling & Simulation	2,044	2,854	3,060	3,114
Total	2,044	2,854	3,060	3,114
B: Budget Acquisition History and Planning Information: N/A	ion: N/A			
	Page	Page 10 of 27		

RDIGE E	BUDGET IT	EM JUSTIE	TICATION	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	út)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDIGE, Defense Wide/07					R-1 ITEM PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Coi	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.329	4.211	4.797	4.883	5.053	5.227	5.226	5.353	Contg	Contg

deployment of DoD information systems by performing a broad spectrum of activities in support of C4I programs including modeling, simulation, focused testing, evaluation, and performing technical and operational assessment techniques on emerging technologies. This work is essential to achieve the DISA goal of quality information services at an affordable cost through a deliberate decision management process. Part of the work is being the leader in C4I models, decision tools, and technical, economic and mitigation risk assessments. The warfighter is provided electronic simulated filed A. <u>Mission Description & Budget litem Justification;</u> ine rapid evolution of the global warfighting requirements to rapidly project forces anywhere force structure and military operations requiring greater flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the planning and decision management required to provide responsive communications and information services to in the world. This project supports the planning and decision management required to provide responsive communications and information services to Mission Description & Budget Item Justification: The rapid evolution of the global military environment is driving a major evolution of the DOD The efforts support integrated DOD communications planning and investment strategy for the successful combat training aids and assessment of contingency operations and exercises through this project.

(U) FY96 Accomplishments:

- o JCDSC: Continue upgrading the JCDSC, developing advanced planning tools and databases. (\$832K) (2nd Qtr 4th Qtr)
- o C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$950K) (2nd Qtr 4th Qtr)
- o C41/Defense Information Infrastructure (DII) Assessment: Provide assessment support to DISA and the operational community. (\$654K) (2nd Qtr 4th otr)
- o Joint Staff Support: Provide analysis and decision management support to the warfighters in the realization of C4IFTW. (\$519K) (2nd Qtr 4th Qtr)
 - o Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. (\$1374K) (2nd Qtr -4th Otr)
- \$4.329M Total

(U) FY97 Plans:

- o Integrated Communication Data Base (ICDB)(\$369K)(1st Qtr 3rd Qtr)
- o C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$985K)(1st Qtr 4th Qtr)
 - C4I/DII Assessment: Provide assessment support to DISA and the operational community.(\$465K)(1st Qtr 4th Qtr)
- Joint Staff Support: Provide analysis and decision management support to the warfighters in the realization of C4IFTW. (\$1612K) (1st Qtr 4th Qtr)

Page 11 of 27

RDT4	RDIGE BUDGET ITEM JUSTIFI	TEM JUSTIF	ICATION (F	CATION (R-2 Exhibit)	_			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	E 11 Communic	ations		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.329	4.211	4.797	4.883	5.053	5.227	5.226	. 5.353	Contg	Contg
O Integrated Network Assessments: Assessments and Commercial telecommunications alternatives to construct the construction of	spes milita	and comm	ergisl tele	Octob to to to	tornat	4				

military and commercial telecommunications alternatives to resolve programmatic issues. (\$550K) (1st Qtr -Integrateu 4th Qtr)

C4I Model: Develop a DOD-wide C4I simulator to support mission test, training and operational exercises. (\$230K)(1st Qtr - 4th Qtr) \$4.211M Total

(U) FY98 Plans:

- o Integrated Communication Data Base (ICDB)(\$369K)(1st Qtr 4th Qtr)
 - o C4I Simulation Integration (\$985K)(1st Qtr 4th Qtr)
 - o C4I/DII Assessment (\$465K)(1st Qtr 4th Qtr)
- o Joint Staff Support (\$1,611K)(1st Qtr 4th Qtr)
- o Integrated Network Assessments (\$550K)(1st Qtr 4th Qtr)
 - C4I Model(\$230K)(1st Qtr 4th Qtr)
- \$4.797M Total

(U) FY99 Plans:

- o Integrated Communication Data Base (ICDB) (\$309K) (1st Qtr 4th Qtr)
 - o C4I Simulation Integration (\$1,220K)(1st Qtr 4th Qtr) o C4I/DII Assessment (\$556K)(1st Qtr 4th Qtr)
- o Joint Staff Support (\$1,966K)(1st Qtr 4th Qtr)
- o Integrated Network Assessments (\$585K)(1st Qtr 4th Qtr) o C4I Model(\$250K)(1st Qtr - 4th Qtr)
 - \$4.883M Total

FFRDC support is <u>Acquisition Strateqy:</u> SETA support contract (CPFF-LOE) was competitively awarded and consists of a base year and four option years. procured sole source through the sponsoring Service (e.g., the Army for MITRE)

27 Page 12 of

RDT	GE BUDGET	RDT&E BUDGET ITEM JUSTIFI	ICATION (R-2 Exhibit)	2 Exhibit)				DATE: Febr	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM N PE 030312	ITEM NOMENCLATURE 0303126K/Long Haul	ul Communications	ations		
COST (in millions)	FY96	FY97	FY98	66X4	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	4.329	4.211	4.797	4.883	5.053	5.227	5.226	5.353	Contg	Contg
B. Program Change Summary				9 5 1	, i	EV9.7	0024	000		
Previous President's Budget (FY 1997)	Y 1997)			4.113	4	4.671	4.749	4.780		
Appropriated value Adjustments to Appropriated Value	alue			4.279	, 1	4.6/1460	,			
Adjustments to Budget Year Since FY 1997	ıce FY 199	7 President's	t's Budget				.048	.103		
Current Budget Submit/President's Budget Change Summary Explanation:	ıt's Budge	t (FY 1998)	_	4.329	4.	4.211	4.797	4.883		
FY96 and FY97 Appropriation.		changes due to below	w threshol	threshold reprogramming		and Congressional adjustment	al adjustm		to Defense-Wide Investment	vestment
Funding: FY98 and FY99 changes	changes	are due to	revised fi	fiscal guidance.	nce.					
Schedule: N/A Technical: N/A										
C. Other Program Funding Summary										
МЗО				FY96 3.244	<u>a</u> .	<u>FY97</u> 3.549	<u>FY98</u> 3.390	<u>FY99</u> 3.433		
			Pe	Page 13 of 27	7					

								 	_
		Total Cost	Contg						
uary 1997		Cost to Complete	Contg				-		
DATE: February 1997	ations	FY03	5.353		FY99	×	×		
	RE tul Communications	FY02	5.226		<u>FY98</u> 1 2 3 4	×	×		
	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	FY01	5.227		<u>FY97</u> 2 3 4				
_	R-1 ITEM PE 030312	FYOO	5.053		1 2	×	×		
RDIAE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)		FY99	4.883	·	<u>FY96</u> 1 2 3 4	×	×		
CATION (F		FY98	4.797						
ITEM JUSTII		FY97	4.211	/ quarter.					
E BUDGET		FY96	4.329	l events by			'Rs)		
RDT4	APPROPRIATION/BUDGET ACTIVITY RDIGE, Defense Wide/07	COST (in millions)	Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	D. <u>Schedule Profile</u> Fiscal Year actual and planned events by quarter.		Execute option year of SETA support contract	Execute FFRDC support (MIPRs)		

Page 14 of 27

RDTEE PROGRAM ELEMENT/PROJECT COST BREAKDOWN		(R-3)		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R I	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co	LATURE Haul Communic	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E61/MILSATCOM
A. Project Cost Breakdown (\$000)		A. Carrier and A. Car		
	96X4	FY97	FY98	FY99
Project Cost Categories	ż			
Modeling & Simulation	4,329	4,211	4,797	4,883
Total	4,329	4,211	4,797	4,883
B. Budget Acquisition History and Planning Information: N/A				
				-
Page	Page 15 of 27			

RDIGE E	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Col	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	1.131	7.496	6.200 6.800	6.800	0	0	0	0	0	21.627

U.S. efforts to maintain the world-wide lead in defensive information warfare. This project supports the acquisition of A. <u>Mission Description & Budget Item Justification:</u> DISN provides the Warfighters and the warfighting Commanders in Chief (CINCs), Joint Task Force (JTF) Commanders and Combined Task Force (CTF) Commanders with a robust C41 information national defense C4I decision support requirements, Corporate Information Management (CIM) functional businesses, and DISN will provide the Warfighters with U.S. Government controlled, secure, switched primarily providing transport. DISN will provide the Warfighters with U.S. Government controlled, secure, switche voice and data, imagery, video teleconferencing, and dedicated point-to-point connectivity. It directly supports This infrastructure is the only subset of the Defense Information Infrastructure (DII) the DISN Services for CONUS, Hawaii Information Transfer System (HITS), Deployable, Pacific, Europe, Information Dissemination Management (IDM), and Integrated Communications Database (ICDB). transfer infrastructure.

(U) FY 1996 Accomplishments:

- o Provide acquisition technical support to CONUS. (\$272K) (1st Qtr 4th Qtr)
- o Provide Mobile Satellite Services (MSS) technical support. (\$172K) (1st Qtr 4th Qtr) o Perform ITSDN Testing to Deployed. (\$208K) (1st Qtr 4th Qtr) o Develop Systems Design OCONUS (Pacific & Europe). (\$479K) (1st Qtr 4th Qtr)

\$1.131M Total

(U) FY 1997 Plans:

- o Develop security firewalls for fixed Mobile Satellite Services (MSS) gateway. (\$1459K) (1st Qtr 2nd Qtr)
 - o Conduct feasibility study and design for Deployable MSS gateway. (\$1290K) (1st Qtr)
- Establishment of this capability will free the space segment to support operations, while fiber supports the high Demonstrate (as a proof of concept) DOD's capability to interface with commercial fiber optics cable operations. capacity administrative and logistics requirements. (\$4542K) (2nd Qtr - 4th Qtr)
 - oo Develop the foundation to advance DISN capabilities to meet the JTF high bandwidth requirements and provide integrated services

Page 16 of 27

RDTGE 1	BUDGET IT	FEM JUSTIE	ICATION	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	PE 0303126K/Long Haul	rure Haul Comm	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	S	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	1.131	7.496	6.200	6.800	0	0	0	0	0	21.627

oo Develop strategy to support DOD bandwidth surge capabilities in future commercial transoceanic cable laying projects. Develop concept of operations for expanding transoceanic fiber based communications infrastructure inland where a high bandwidth infrastructure does not exist. 00

Communicate DOD needs to rapidly deploy a fiber based global infrastructure for industry to include in future R&D programs. 00

Demonstrate capability to expand fiber optic links from existing commercial cable heads to newly established cable heads and rapidly deploy a high bandwidth infrastructure to support the JTF. 8

o Provide technical support to DISN architecture and integration group and continue requirements gathering and assessment in support of post-JSMB efforts. (\$205K) (2nd Qtr) \$7.496M Total

(U) FY 1998 Plans:

o Advanced concept development of a DoD Information Dissemination Management (IDM) capability. (\$6.200M) (2nd - 4th Qtr)

(U) FY 1999 Plans:

o Continue development of a DoD IDM capability and begin testing IDM concepts. (\$6.800M) (3rd - 4th Qtr)

Acquisition Strategy:

Y96: FFRDC Support (MITRE)

Y97: FFRDC Support (MITRE), MSS Contract Award, SAIC Support

RDTGE E	DTEE BUDGET I	BUDGET ITEM JUSTIF	JUSTIFICATION (R-2	R-2 Exhibit)	oit)			DATE: February	ruary 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	ITEM NOMENCLATURE 0303126K/Long Haul	1	Communications	w	
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	1.131	7.496	6.200	6.800	0	0	0	0	0	21.627
B. Program Change Summary										
110000000000000000000000000000000000000	() () () () () () () () () ()		YI.	ıol	FY97	FY98	<u>FY99</u>	Total Cost	Cost	
revious Fiestaent's Buaget (FI 1997)	11881		2.131		7.558	0	0	13.307	7	
Appropriated Value			1.244	7	7.558					
Adjustments to Appropriated Value				1	.062		•			
Adjustments to budget rear since r	e FY 1997	President'	s Budget		,	6.200	6.800			
Charge Summan Final Lations	: s Budget	(FY 1998)	1.131		7.496	6.200	6.800	21.627		
Funding: FY96 and FY97 changes FY98 and FY99 changes	due are	due to below threshold reprogrammings are due to initiative on Information D	reshold rej iative on	programming Information	gs and Cong n Dissemina	to below threshold reprogrammings and Congressional adjusdue to initiative on Information Dissemination Management	adjustments Jement.	, vi	-	
C. Other Program Funding Summary	H									
	되	FY96 FY97		FY98 FY99	99 FY00	30 FY01		Total Cost		
М3О	7.3	7.324 9.6	9.626 4.488	188 5.458						
D. Schedule Profile (U) FY 1996										
MITRE Award		lst	Qtr							
(U) <u>FY 1997</u> MITRE Award		, t	ç							
t Award and SAIC r/TAC Interface	: Award Contract Award	1 ()	nd Qtr TBD							
			18	of 27						
•										

	RI	TEE PROGRA	RDIGE PROGRAM ELEMENT/PROJECT	JECT COS	COST BREAKDOWN	11	(R-3)				DATE: February 1997	
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY				м	R-1 ITE PE 0303	EM NOME	1 ITEM NOMENCLATURE 0303126K/Long Haul Co	mmunica	RE Communications/H20 DISN Acquisition	
A. Project		down (\$000)				FY96		FY 9.7	FY98	8	FY 9 9	
 - -	and Technical	cal services	മ			1,131		7,496	6,2	. 002'9	6,800	
Total						1,131		7,496	6,200	00;	6,800	
B. Budget	Acquisition	History a	Budget Acquisition History and Planning In	.formation:	<u>on:</u>							
Contractor or Government	Contract Method/Tvne	Award or	Performing	Project	Total							·········
Performing Activity	or Funding Vehicle	Obligation Date	Activity EAC	Office EAC	<u>.</u> 0	Budget FY96	Budget FY97	Budget 1 FY98	Budget Bu EY99 Co	Budget To <u>Complete</u>	Total <u>Program</u>	
Product Development Organizations MITRE MIPR	ent Organizations MIPR	01 Oct 94	2284	2284	1361	923	0	0	0	. 0	2284	
All other contract						208	7496	6200	0089			
		Subtotal Contracts	racts			1131	7496	6200	6800			
				Ωı	Page 19	of 27	7					

RDTGE	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Co	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ations		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FYOI	FY02	FY03	Cost to Complete	Total Cost
Project H80 Defense Message System (DMS)	2.584	*	0	0	0	0	0	0	Contg	Contg

interoperable, cost effective messaging/directory service than that which is in place today. Current support is focused ensure that the Joint Staff (JS) and OSD (C3I) validated messaging requirements are satisfied through the use of a COTS-The purpose of this project is to provide system engineering to and influencing industry to include DMS features as part of their standard product offerings. * This project is funded transitional interoperability requirements and components/services; technology insertion and service demonstrations; on developing secure messaging/directory/management services through requirements definition and refinement; target based, multi-level secure messaging and directory service. The DMS provides the defense community with a more component Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing Mission Description & Budget Item Justification: in PE0303129K beginning in FY1997.

U) FY 1996 Accomplishments:

- o Redsign DMS Target Architecture and Implementation Strategy (TAIS) to reflect changes in security products/solutions, additional definition of Joint Task Force (JTF) and tactical user/environment, and program milestones. Work with DMS vendor to finalize initial topology, design, network sizing, planning, and phasing for the networks, including DISN transport. (\$716K) (1st Qtr - 4th Qtr)
 - Support DMS Test and Evaluation (T & E) efforts including finalization of Compliancy Definition, Site Acceptance Recommendations, and observation, analysis/evaluation of IOT&E test execution. (\$220K) (1st Qtr - 4th Qtr)
- civilian, national and international standards fora. Feeds into this effort include participation in Joint Warrior Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and Interoperability Demonstration (JWID), Electronic Commerce/Electronic Data Interchange (EC/EDI), and other integration/demonstration efforts. (\$1108K) (1st Qtr - 4th Qtr)
- Develop user registration strategy/plan, finalize management staffing analysis for LCC, refinement of management concepts via management capability prototyping. (\$540K) (1st Qtr - 4th Qtr)

Page 20 of 27

RDT&E B	RDIGE BUDGET ITEM JUSTI	EM JUSTII	FICATION	(R-2 Exhibit)	oit)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 030312	ITEM NOMENCLATURE 0303126K/Long Haul		Communications	ø	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project H80 Defense Message System (DMS)	2.584	*	0	0	0	0	0	0	Contg	Contg
FY 1997 Plans:										
Inis project nas been transferred	0	PE 030312	yK.	•						
B. Program Change Summary							i.			
					FY96	FY97	FY	FY98	<u>FY99</u>	
's Budget	(FY 1997)	_			2.589	0		0	0	
_					2.850					
Adjustments to Appropriated Value Adjustments to Budget Year Since FY	FY	1997 Pres	President's E	Budget	266					
let	B			'n	2.584	0		0	0	
Change Summary Explanation: Funding: FY96 reduction due to C	ue to ing is	ongres in PE	•	adjustments. K.						
Schedule: N/A										
								,		
			Page	21 of 27	7					

Note	RDIGE E	RDIGE BUDGET ITEM JUSTIF	JUSTIFIC	CATION (ICATION (R-2 Exhibit)	oit)			DATE: Fe	February 1997	
FY96	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEN PE 03031	1 NOMENCLA 26K/Long	1	unication	v.	
Stand Total Tota	COST (in millions)	FY96	FY97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
ing Summary FY96 FY97 FY98 FY99 FY00 FY01 FY02 J0.510 35.620 37.109 38.967 24.228 17.642 18.008 27.825 41.362 44.470 44.289 29.719 20.592 21.076 ernal) (2 Qtr) (1 Qtr) (2 Qtr)/Test Plan (3 Qtr) d Profile (draft) (3 Qtr)		2.584	*	0	0	0	О	0	0	Contg	Contg
FY96 FY97 FY98 FY99 FY00 FY01 FY02 18.008 20.510 35.620 37.109 38.967 24.228 17.642 18.008 27.825 41.362 44.470 44.289 29.719 20.592 21.076 ernal) (2 Qtr) (1 Qtr) (1 Qtr) (1 Qtr) (1 Qtr) (1 Qtr) (1 Qtr) (2 Qtr)/Test Plan (3 Qtr) cture (classified) (3 Qtr) d Profile (draft) (3 Qtr)	other	nary									
ernal) (2 Qtr)	UREMENT	·	FY98 37.109 44.470	FY99 38.967 44.289	FY00 24.228 29.719		7	<u>Y0</u> 3 8.433 21.606		÷	
ernal) (2 Qtr)											
ernal) (2 Qtr)										-	
	(U) <u>FY 1996</u> Acquisition Milestones Pre-MAISRC (DISA Internal) MAISRC (MS III) Engineering Milestones TAIS Redesign API Standard EC/EDI Capabilities Report DMS Security Architecture (c Tactical Standardized Profil	(2 Qtr) (3 Qtr) (1 Qtr) (1 Qtr) (2 Qtr)/T classified) Le (draft)	est Plan (3 Qtr		22 of	ŗ.					

	R	OTEE PROGRAM	RDIGE PROGRAM ELEMENT/PROJECT	JECT CO:	ST BREA	COST BREAKDOWN	(R-3)			DATE: February 1997
APPROPRIATION/BUDGET RDI&E, Defense Wide/07		ACTIVITY					R-1 ITE PE 03031	EM NOMEI	ITEM NOMENCLATURE	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/H80/DMS
A. Project	Project Cost Breakdown	(\$000)	(
Droject Cost Categories	ָר ער פּער אַר פּער פּער פּער פּער פּער פּער פּער פּע	v			FY96		FY97	ы	<u>EY98</u>	FY99
a. Engineering	ring and Te	hnical	Services		2,584		0		0	0
Total					2,584		0		0	0
B . <u>Budget</u>	Budget Acquisition History and	n History	Planning	Information	ion					
(·									
Contractor or Government	Contract Method/Type	Award or	Performing	Project						
Performing Activity	or Funding <u>Vehicle</u>	Obligation <u>Date</u>	Activity EAC	Office <u>EAC</u>	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget To Complete	Total <u>Program</u>
Product Development Organizations	unt Organizations								,	
Booz-Allen	MIPR and/or PR 15 Nov 94	'R 15 Nov 94	3697	3697	1022	0	0	0	Contg	Continuing
Support and Management Organizations	ement Organizatio	ons Section 1994	100 C	9		ć	•			
MIIKE	MILYK	01 Oct 94	13005	13005	1562	0	0	0	Contg	Continuing
			Subtotal Contracts	ts	2584	0	0	0		
				ŗ.	Page 23 of 27	72				
					0					

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RDTGE 1	BUDGET IT	EM JUSTIE	ICATION (RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	_
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	unication	v	
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project W90 White House Situation Support Staff	. 446	.454	.463	.457	.471	.485	.496	.507	Contg	Contg

A. Mission Description and Budget Item Justification:

the National Security Advisor and his staff. This effort emphasizes information exchange and display and procedures. This project is part of the National Security Information and Situation Management System (NSI & SMS) This project ensures that full level crisis management capabilities are provided to the President, Vice President,

FY1996 Accomplishments

(\$446K) (1st Qtr - 3rd Qtr) Continued development of Decision Support Systems for the White House Situation Room.

(U) FY 1997 Plans:

(\$454K) (2nd Qtr - 3rd Qtr) o Continue development of Decision Support Systems for the White House Situation Room.

(U) FY 1998 Plans:

(2nd Qtr - 3rd Qtr) (\$463K) o Continue development of Decision Support Systems for the White House Situation Room.

(U) FY 1999 Plans:

(\$457K) (2nd Qtr - 3rd Qtr) o Continue development of Decision Support Systems for the White House Situation Room.

Page 24 of 27

Unclassified

RDICE B	UDGET IT	EM JUSTI	RDIGE BUDGET ITEM JUSTIFICATION (R-2	(R-2 Exhibit)	it)			DATE: Fe	February 1997	7
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM PE 03031	ITEM NOMENCLATURE 0303126K/Long Haul	i	Communications	κχ	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Project W90 White House Situation Support Staff	.446	.454	.463	.457	.471	.485	. 496	.507	Contg	Contg
B. Program Change Summary										
's Budget	(FY 1997)				<u>FY96</u>	FY97	E .	FY98 . 464	<u>EY99</u> . 459	
					.483	.467				
Adjustments to Budget Year since FY 1997 Current Budget Submit/President's Budget Change Summary Explanation:	ce FY 19 t's Budg		dent's 998)	Budget	. 446	.454	001	.001	002	
Funding: FY96 and FY97 reductions	ons are	are due to Co	Congressional	nal adjustment	to	Defense-wide		ment Appı	Investment Appropriation.	
Schedule: N/A Technical: N/A										
C. Other Program Funding Summary:	ary:						•	C E		,
Procurement Line P-1 O&M			FY96 2.235 2.352	EY97 1.600 2.827		<u>FY98</u> 1.851 2.723	<u>FY99</u> 1.739 3.053	Contg.		t t t . t t g .
			Page	25 of	27					

Unclassified

RDTGE E	BUDGET IT	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	TICATION	(R-2 Exhib	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM PE 03031	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	ınication	w	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Project W90 White House Situation Support Staff	.446	.454	.463	.457	.471	.485	.496	.507	Contg	Contg

. Schedule Profile

(U) <u>FY1996</u>

T&E Milestones:

Continue development of Decision Support Systems for the White House Situation Room (3rd qtr FY96)

(U) FY1997

Contract Milestones:

Contract/Study to be delivered (3rd qtr FY97)

(U) FY1998

Contract Milestones:

Contract/Study to be delivered (3rd qtr FY98)

(U) <u>FY1999</u>

Contract Milestones:

Contract/Study to be delivered (3rd qtr FY99)

Page 26 of 27

Unclassified

RDILE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	1 1	(R-3)	DATE: Februray 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	K d	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Comm	Communications/W90/WHSSS
A. <u>Project Cost Breakdown</u> (\$000)			
Project Cost Categories a. Engineering and Technical Services		FY96 FY97 FY98 FY99	
B. Budget Acquisition History and Planning Info	<u> Eormation:</u> N/A		
			-
	·		
	Page 27 of 27		

RDILE BUDGET ITEM JUSTIF	T ITEM J	JSTIFICAT	ICATION (R-2 Exhibit)	Exhibit	•			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITE Support	R-1 ITEM NOMENCLATURE Support of the NCS/P.E.	<u>ы</u>	0303127K		
COST (in millions)	FY96	FY97	FY98	FY99	EX00	FY01	FY02	FY03	Cost to Complete	Total Cost
Total 0303127K Cost	3.486	3.808	4.552	4.545	4.507	5.358	5.473	5.602	Cont.	Cont.
Enhanced Satellite Capability/N092	.439	.428	.519	.421	.421	.435	555.	.444	Cont.	Cont.
Interoperability/N088	1.476	1.558	1.759	1.849	1.849	2.648	2.651	2.776	Cont.	Cont.
Information Assurance/N094	.250	.503	.521	.525	.525	.525	. 599	.599	Cont.	Cont.
Advanced Intelligent Network/N091	1.117	1.115	1.298	1.280	1.242	1.280	1.300	1.304	Cont.	Cont.
NS/EP Telecommunications Integration Support/N095	.204	.204	.455	.470	.470	.470	.479	.479	Cont.	Cont.

Mission Description and Budget Item Justification

NASA's Advanced Communications Technology Satellite (ACTS), preparing secure voice experiments over American Mobile Satellite Corporation Telecommunications Integration (formerly a subset of AIN), provides a test and evaluation program to assess and evaluate the operational readiness and capabilities of NS/EP telecommunications programs, initiatives, and emerging technologies. This program element is under This program element supports Executive Order 12472 of 3 April 1984 which assigns the NCS the mission of assisting the President, the National Security Council, the Office of Science and Technology Policy, and the Office of Management and Budget, in exercising their Assurance (formerly Network Security) supports the Public Switched Network (PSN) in mitigating hacker threats. Advanced Intelligent developing satellite technologies and applications which include experiment preparation and terminal modification to experiment with require that initiatives be developed that will improve the survivability and interoperability of the commercial telecommunications evolving National Information Infrastructure will meet the needs of government NS/EP users. Enhanced Satellite Capability explores systems that support national security and emergency preparedness requirements, enhance the survivability and endurability of U.S. essential functions in any emergency. Additionally, this program element will support programs which will help to ensure that the wartime and non-wartime telecommunications functions and responsibilities, and coordinating the planning for, and provisioning of, attain this objective, there are several National Security Decision Directives which provide additional guidance to the NCS which Telecommunications Standards Program, and ensures interoperability among emerging government communications systems. Information commercial satellites, and provide communications support for Government agencies which have responsibilities to carry out their Network employs newly developed processing capabilities to tailor the extensive telecommunications resources of the PSN. NS/EP National Security and Emergency Preparedness (NS/EP) telecommunications for the federal government under all circumstances. Mobile Satellite (MSAT), and the analysis of the newly proposed low earth systems. Interoperability supports the Federal Budget Activity 07 because it involves efforts supporting operational systems development.

Page 1 of 19

RDTGE 1	BUDGET IT	EM JUSTIF	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	λit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National (System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	nications		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Enhanced Satellite Capability (ESC)/N092	.439	.428	.519	.421	.421	.435	. 444	. 444	Cont.	Cont.

Mission Description & Budget Item Justification:

of new satellite communication technologies. ESC will acquire knowledge of evolving technologies; support development of National Security Telecommunications Advisory Committee (NSTAC) initiatives; evaluate new commercial satellite capabilities; assure that industry This project will provide greatly enhanced and cost-effective telecommunications for all operational environments with the incorporation Regarding acquisition is aware of NS/EP requirements and stress the importance of these features in new systems; develop concepts and architectures for acquiring advanced satellite communications service and performing test and evaluation of acquired capabilities. Regarding acquired the second acquired capabilities and service and performing test and evaluation of acquired capabilities. strategy, work will continue under existing contract vehicles.

FY1996 Accomplishments:

- Conduct experiments utilizing an ACTS High Data Rate (HDR) terminal to test SONET, Broadband ISDN (BISDN), and ATM technologies in the KA Spectrum of band width. (\$154K) (1st Qtr - 4th Qtr) 0
 - Research potential of developing satellite technologies and systems: low earth orbit (LEO) and geostationary orbit (\$131K) (1st Qtr - 4th Qtr) satellites, and continue experimentation.
- Identify and determine candidate NS/EP National Information Infrastructure (NII) requirements (priority access, secure voice) that can be served via a satellite platform and experimentation. (\$154K) (1st Qtr - 4th Qtr) \$.439M Total 0

FY1997 Plans:

- (\$59K) (1st Qtr 4th Qtr) Analyze and document results of NCS ACTS High Data Rate Experiments. 0
- Emphasis of experimentation will be targeted toward evolving Mobile Satellite Systems and influencing their design to include NS/EP desired features Perform experimentation of NS/EP NII requirements and summarize results. (\$225K) (1st Qtr - 4th Qtr)
- Perform analysis of inventory and evaluate industry activities for the potential of meeting NS/EP requirements (\$144K) (1st Qtr - 4th Qtr) \$.428M Total 0

FY1998 Plans:

Support development of NS/EP capabilities (e.g., priority, security) on developing mobile satellite systems. (1st Qtr - 4th Qtr)

Page 2 of 19

RDTGE	BUDGET I	RDICE BUDGET ITEM JUSTIFICATION	ICATION (R-2	-2 Exhibit)				DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	TURE onal Commun 3127K	Communications		
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Enhanced Satellite Capability/N092	.439	.428	.519	.421	. 421	. 435	. 444	. 444	Cont.	Cont.
O Perform testing and experimentation of NS/EP (\$128K) (1st Qtr - 4th Qtr)	rimentati ltr)	on of NS/E	P capabilities	uo	existing and	developing	mobile	satellite sy	systems.	- Artheren
O Conduct experiments utilizing emerging satellite and capabilities. (\$125K) (1st Qtr - 4th Qtr)	lizing eme ok) (1st Q	rging satelli tr - 4th <u>O</u> tr)	llite systems tr)	to	demonstrate the		interoperability with	ith other	other wireless systems	ems
O Continue project planning of research, testing, (\$116K) (1st Qtr - 4th Qtr) \$.519M Total	ng of rese htr) \$.5199	arch, test M Total		evaluation, reco	recommendations,		and implementation	of	new technologies.	
FY 1999 Plans:					•					
O Validate the ability of operational and dev (\$100K) (1st Qtr - 4th Qtr)	operation (tr)	al and dev	eloping mob	mobile satellite	ite systems	to	support NS/EP users	sers.		
O Demonstrate and verify the interoperability	the intero	perability	between	wireless sys	systems, incl	including sate	satellite, cel	cellular, and	PCS technologies	ogies.
(\$221K) (1st Qtr - 4th Qtr) O Continue implementation of MS/FD functional	ltr) of Mc/ED	functional			, and				,	
	or no/ Er ltr) \$.42	\$.421M Total	iedarremen		roping and	pranned mobile		sacellice systems	ems.	
B. Program Change Summary										
Previous President's Budget (FY 1997)	(26)			FY 1996	된	<u>FY1997</u>	FY1998	co!	FY1999	
Appropriated Value				.597		.479			T 71.	
Adjustments to Appropriated Value				158	•	051				
Adjustments to Budget Year Since FY 97		President's Budget	dget							
Current President's Budget (FY 1998)	(8)			.439		.428	.519		.421	
			P	Page 3 of 19	0					

RDTGE 1	BUDGET IT	EM JUSTIF	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support System(N	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	mmunicati	ons	
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Enhanced Satellite Capability (ESC)/N092	.439	. 428	.519	.421	.421	.435	. 444	.444	Cont.	Cont.

Change Summary Explanation

Funding: FY96 and FY97 reductions due to Congressional adjustments.

Schedule: N/A Technical: N/A

C. Other Program Funding Summary: N/A

D. Schedule Profile

FY96 - 3rd quarter: Analysis of developing satellite systems and operational mobile satellite systems applicable to NS/EP users. FY97 - 3rd quarter: Analysis of operational mobile satellite systems and their relationship to the NS/EP community.

FY98 - 3rd quarter: Analysis of developing satellite systems and operational mobile satellite systems applicable to NS/EP users.

FY99 - 3rd quarter: Analysis of operational mobile satellite systems and their relationship to the NS/EP community.

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	KDOWN (FCT COST BREAKDOWN (R-3)	DATE:	DATE: February 1997	1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ц, от —	R-1 ITEM NOMENCLATURE Support of the National ((NCS)/0303127K/Enhanced 5	Communications Satellite Capak	Communications System Satellite Capability (N092)	.em :y (N092)
A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories	FY1996	FY1997 E	FY1998		FY1999
Engineering & Technical Service Total	439	428 428	519 519		421 421
B. Budget Acquisition History and Planning Information (\$000) Performing Organizations					
Support & Management Organization Test & Evaluation Organization Total Project	Budget 110 329 439	Budget Budget FX1997 FX1998 113 174 315 345 428 519		Budget 122 299 421	Total Program Cont. Cont.
Page	Page 5 of 19				

RDTGE I	BUDGET II	EM JUSTIE	RDTGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NC	R-1 ITEM NOMENCLATURE Support of the National (System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NÇS)/P.E.0303127K	nications		
COST (in millions)	FY96	FY97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Interoperability/N088	1.476 1.558	1.558	1.759	1.849	1.849	2.648	2.648 2.651 2.776	2.776	Cont.	Cont.

Mission Description & Budget Item Justification:

the NCS member organizations and other government agencies through the development of initial specification and correlation of standards conducts related technical evaluations and standards development. Supports the Federal Telecommunications Standards Program. Ensures interoperability among emerging government communication systems, including information systems, by providing the required analyses to for specific types of communication and information systems; the design of initial automated methods for application of standards to systems; the refinement and evaluation of program objectives in evolving technology environment. Regarding acquisition strategy, new This project analyzes new telecommunications technologies and their effects on interoperability of government communications and reimbursable orders will be used.

FY1996 Accomplishments:

- Develop techniques and analyses to implement national security and emergency preparedness (NS/EP) requirements in emerging standards for wide-band networks and wireless services of the National Information Infrastructure. (\$626K) (1st Qtr - 4th Qtr)
- Develop strategies and detailed specification for methods of congestion control in asynchronous transfer mode (ATM) networks, to help ensure reliable NS/EP communications (\$400K) (1st Qtr - 4th Qtr)
- Develop analytical methods for determining NS/EP quality requirements for multi-media communications over the National Information Infrastructure (\$450K) (1st Qtr - 4th Qtr) \$1.476M Total 0

FY1997 Plans:

- Develop additional and updated techniques for reliable and secure NS/EP communications in wide-band and wireless networks. (1st Qtr - 4th Qtr) (\$652K) 0
- Develop additional and updated methods and proposed standards for flow controlling asynchronous transfer mode congestion ensure reliable NS/EP communications (\$441K) (1st Qtr - 4th Qtr) to help 0
- analyses, methods, and standards for assessing quality of multi-media NS/EP communications (1st Qtr - 4th Qtr) \$1.558M Total Develop (\$465K) 0

FY1998 Plans:

Continue development of network management standards for congestion control in NS/EP services on high speed networks. (\$450K) (1st Qtr - 4th Qtr)

Page 6 of 19

RDTGE B	UDGET IT	RDIGE BUDGET ITEM JUSTIFICATION		(R-2 Exhibit)	it)			DATE: Fe	February 1997	1
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	TURE onal Commun 3127K	Communications		# # # # # # # # # # # # # # # # # # #
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FYO3	Cost to Complete	Total Cost
Interoperability/N088	1.476	1.558	1.759	1.849	1.849	2.648	2.651	2.776	Cont.	Cont.
O Develop analyses and contributions to standards detection points (\$459K) (1st Qtr - 4th Qtr)	tribution (1st Qtr	s to stand - 4th Qtr	ards foras	to support	support NS/EP ser	vices prio	rity at in	telligent	services priority at intelligent network trigger	ger
O Assessment of emerging technology and NS/EP	echnology	and NS/EP		ons (\$350K)	applications (\$350K) (1st Otr -	- 4th Qtr)				
O Continue development of reliable and secure (\$500K) (1st Otr - 4th Otr) \$1.759M Total	reliable tr) \$1.75	and secure		s for wirel	techniques for wireless networks and services	ks and ser	vices			
FY 1999 Plans:										
O Continue to resolve impediments to interoperability of systems supporting government communications. (\$450K) (1st Qtr - 4th Qtr)	diments t tr)	o interope	rability of	f systems :	npporting	government	communica	tions.		
O Continue to analyze network management and solve NS/EP communication issues. (\$400K)	ork manag n issues.	ement and (\$400K)	congestion (1st Qtr -	control of 4th Qtr)	: emerging	high-speed	digital n	etworks to	congestion control of emerging high-speed digital networks to identify and (1st Qtr - 4th Qtr)	ਚ
O Continue to assess emerging technology and	ing techn	ology and	NS/EP appli	application (\$399K)	199K) (1st	(1st Qtr - 4th Qtr)	Otr)		-	
O Develop analyses and contibutions in support of the development of video (\$600K) (1st Qtr - 4th Qtr) \$1.849M Total	tribution tr) \$1.84	s in suppo 9M Total	rt or the c	aevelopment	of video	teleconfer	encing and	multi-med	teleconferencing and multi-media standards	
B. Program Change Summary		ř								
Previous President's Budget (FY 1997)	126			FY 1996	ᄧ	FY1997	FY1998	co	FY1999	
Appropriated Value				1.573	· ~	1.507	r 0 0		0.1	
Adjustments to Appropriated Value				097		.051				
Adjustments to Budget Year Since FY 97 President's Budget	Y 97 Pres	ident's Bu	dget				.175		.209	
Current President's Budget (FY 1998)	8)			1.476	1	1.558	1.759		1.849	
			Pē	Page 7 of 19						

щ	RDIÆE BUDGET ITEM JUSTIFICATION	GET ITE	IM JUSTIF	li .	(R-2 Exhibit)	it)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	TIVITY					R-1 ITEM Support System(No	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	TURE tional Co 303127K	Communications	ons	
COST (in millions))±4	FY96	FY97	FY98	FY99	FYOO	FY01	FY 0.2	FY03	Cost to Complete	Total Cost
Interoperability/N088	1.	1.476	1.558	1.759	1.849	1.849	2.648	2.651	2.776	Cont.	Cont.
Change Summary Explanation Funding: FY96 reduction due to congressional adjustments. FY97 change due to below threshold reprogramming. FY98 and FY99 changes due to revised fiscal guidance Schedule: N/A Technical: N/A	to below t	gression threshol to revi	nal adjust .d reprogr .sed fisca	ments. amming. l guidance.				,			
C. Other Program Funding Summary:	ig Summar	:: K									
EY1 O&M 2.	<u>FY1996</u> <u>FY</u> 2.971 3	<u>EY1997</u> 3.289	<u>EY1998</u> 3.377	FY1999 3.500	<u>FY2000</u> 3.500	FY2001 3.500	<u>FY2002</u> 3.500	FY2003 3.500	Total Cost Cont.	-	
D. Schedule Profile											
FY96 - 3rd quarter: Rece qual FY97 - 2nd quarter: Rece of m FY98 - 4th quarter: Rece FY99 - 4th quarter: Rece	Receive report from Instit- quality of multi-media tra: Receive report from Nation of multi-megabit switched Receive reports on analyse. Receive reports and assessi	rt fron ulti-me rt fron abit sw rts on	From Institute for media transmission National Instructional instruction and its and assessments	ute for Telecomm nsmission, from a al Institute of s digital circuits s and contributionents of emerging	lecommuni from a u te of Sta rcuits. ributions	ute for Telecommunications Science on algorithm devensmission, from a user's perspective. al Institute of Standards and Technology on rapid (<digital and="" applications="" applications.<="" circuits.="" contributions="" emerging="" ep="" for="" multi-ments="" ns="" of="" on="" s="" td="" technology="" to=""><td>science or sspective. d Technol applicat for NS/E</td><td>algorith ogy on ra ions to m</td><td>um develop pid (< 1 nulti-medi ttions.</td><td>ute for Telecommunications Science on algorithm developed to quantify nsmission, from a user's perspective. al Institute of Standards and Technology on rapid (< 1 second) restoral digital circuits. s and contributions on NS/EP applications to multi-media standards. ments of emerging technology for NS/EP applications.</td><td>tify storal s.</td></digital>	science or sspective. d Technol applicat for NS/E	algorith ogy on ra ions to m	um develop pid (< 1 nulti-medi ttions.	ute for Telecommunications Science on algorithm developed to quantify nsmission, from a user's perspective. al Institute of Standards and Technology on rapid (< 1 second) restoral digital circuits. s and contributions on NS/EP applications to multi-media standards. ments of emerging technology for NS/EP applications.	tify storal s.

Page 8 of 19

RDILE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	OST BREAKDOWN	(R-3)		DATE: Febr	February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLATURE Support of the National Communications (NCS)/0303127K/Interoperability (N088)	LATURE National Com Interoperabi	1	System
A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories	FY1996	FY1997	FY1998	86	FX1999
Engineering & Technical Service Total Project	1,476	1,558 1,558	1,759 1,759	55 59	1,849 1,849
B. <u>Budget Acquisition History and Planning Information</u> (Serforming Organizations	(\$000)				
Test & Evaluation Organization Product Development Organization Total Project	Budget <u>FY1996</u> 1,163 313 1,476	Budget <u>FY1997</u> 1,209 349 1,558	Budget <u>FY1998</u> 1,418 341 1,759	Budget <u>FY1999</u> 1,490 359 1,849	Total <u>Program</u> Cont. Cont. Cont.
	Page 9 of 19				

RDIGE E	BUDGET IT	EM JUSTIE	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	(R-2 Exhib	it)			DATE: Fe	DATE: February 1997	7
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	lications		
COST (in millions)	FY96 .	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Information Assurance/N094	.250	.503	.521	.525	.525	.525	.599	.599	Cont.	Cont.

. Mission Description & Budget Item Justification:

via the Public Switched Network (PSN). The research gained from this project will be used to develop a consistent framework of guidelines that will be useful to government and industry in assuring that critical software supporting and/or controlling telecommunications switches can be trusted to perform as required in support of PSN. Regarding acquisition strategy, new reimbursable This project, formerly titled Network Security, was initiated to mitigate the hacker threat posed to NS/EP telecommunications carried orders will be used.

FY1996 Accomplishments:

- Develop software tools useful in identifying and eliminating security vulnerabilities from large computer programs such as those used in communications systems (\$125K) (1st Qtr - 4th Qtr) 0
 - Evaluate security tools and techniques relevant to communication systems and provide guidelines for protecting communications systems from computer intruders (\$125K) (1st Qtr - 4th Qtr) \$.250M Total 0

FY1997 Plans:

- Develop additional tools to identify and eliminate security vulnerabilities in large computer programs such as those used Update previously developed tools for application to emerging computer systems (\$301K) (1st Qtr - 4th Qtr) in communications systems. 0
 - Evaluate additional security tools and techniques relevant to communications systems and provide updated guidelines (\$202K) (1st Qtr - 4th Qtr) \$.503M Total 0

FY 1998 Plans:

- Research and evaluate the application of existing and emerging software packages and other tools that enhance security in communications and information systems that support NS/EP (\$300K) (1st Qtr - 4th Qtr) 0
 - Develop additional tools and procedural guidelines for NS/EP network security (1st Qtr - 4th Qtr) \$.521M Total 0

FY 1999 Plans:

- Continue researching and evaluating software tools for enhancing security in NS/EP telecommunications and information systems (\$300K) (1st Qtr - 4th Qtr) 0
- Continue developing tools and guidelines for protecting NS/EP systems as new threats and vulnerabilities emerge. (\$225K) (1st Qtr - 4th Qtr) \$.525M Total 0

age 10 of 19

RDIGE		WILE BUDGET ITEM JUSTIF	ICATION (R	(R-2 Exhibit)	•			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM 1 Support of System(NCS)	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	ATURE onal Commun 3127K	Communications		
COST (in millions)	FY96	FY 97	FY98	FY99	FY 0 0	FY01	FY02	FY03	Cost to Complete	Total Cost
Information Assurance/N094	.250	.503	.521	.525	.525	.525	. 599	.599	Cont.	Cont.
B. Program Change Summary										
Previous President's Budget (FY 1997)	FY 1997)				FY 1996	FY1997	<u>Y1997</u>	FY1998	FY1999	66
Appropriated Value					.499	י יי	.503	176.	676.	 n
Adjustments to Appropriated Value	alue nce rv 97	97 Dree: dent's		ţ	249		i I			
Current Budget Submit/President's Budget (FY 1998)	nt's Budg	et (FY 19	198)	נ	.250	5	503	.521	.525	2
Change Summary Explanation Funding: FY96 adjustment due to below threshold reprogramming.	e to belo	w thresho	ld reproc	ramming.					-	
C. Other Program Funding Summary				•					i	
<u>FY1996</u> O&M 2.164	<u>FY1997</u> 2.111	7 <u>FY1998</u> 2.073	ᄪ	·	FY2000 EN	FY2001 3.316	<u>FY2002</u> 3.393	FY2003 3.593	Total Cost Cont.	
D. Schedule Profile										
FY96 - 4th quarter: Beta test version of "Decompositi programs	sion of "D	ecompositi	on Slicing	" tool for	Slicing" tool for analyzing effects	effects o	of maintenance changes	ice changes	in large	computer
FY97 - 4th quarter: Evaluations of FY98 - 4th quarter: Evaluations of	f security f emerging	features software	in switcher tools for	s performe intrusion	in switches performed by the Telecommunications tools for intrusion monitoring and detection in	elecommunicand and detect		urity Anal ge compute	Security Analysis Center large computer and switching	ing
systems FY99 - 4th quarter: Software tools	s and proc	and procedures for		/EP net	work security	ity				
			ra	3	13					

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	JWN (R-3)		DATE: February 1997	uary 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Information Assurance (N094)	ATURE ational Cor nformation	mmunications Sys Assurance (N094	tem }
A. Project Cost Breakdown (\$000) FY1996	96 FY1997	FY1998	866	FY1999
Project Cost Categories				
Engineering & Technical Service	503		521	525
B. Budget Acquisition History and Planning Information: N/A				
		·		
				-
Page 12 of 19	of 19			

RDTGE 1	SUDGET IT	EM JUSTIF	ICATION (RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NC)	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127R	ucations		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Advanced Intelligent Network/N091	1.117	1.115	1.298	1.280	1.242	1.280	1.300	1.304	Cont.	Cont.

Mission Description & Budget Item Justification:

existing Public Switched Network (PSN), which includes the Local Exchange Carrier (LEC) and Inter Exchange Carrier (IEC) Networks, thus enhancing connectivity and survivability of services for essential government users during periods of emergency. Advanced Intelligent media. This research will result in the utilization of these components, in a customized set of network services and rear learibly, rapidly and cost effectively configured by customers upon demand on an as needed basis. Regarding acquisition strategy, work will This project is required to employ newly developed processing capabilities to tailor the extensive telecommunications resources of the Network (AIN) is an evolving PSN capability consisting of signaling systems, switches, computer processing, databases and transmission Regarding acquisition strategy, work will continue under current contract vehicles.

Y1996 Accomplishments:

- Evaluate AIN industry developments and capabilities for potential applications to NS/EP telecommunications (\$200K) (1st Qtr - 4th Qtr)
- Determine AIN relationships to evolving National Communications System (NCS) requirements for advanced intelligent capabilities and data services, define applications for implementation into OMNCS initiatives (\$250K) (1st Qtr - 4th Qtr) 0
- Transfer Mode (ATM) and Personal Communications (PCS), for potential integrated voice, data, wireline and wireless services Research AIN interoperability with emerging technologies such as Integrated Services Digital Network (ISDN), Asynchronous (\$250K) (1st Qtr - 4th Qtr) 0
- Analyze AIN Bellcore generic requirements for potential NS/EP considerations and influence AIN implementation as the technology becomes standardized (\$220K) (1st Qtr - 4th Qtr) 0
- Research mediated access FCC issues for further development of AIN switches and elements (\$197K) (1st Qtr 4th Qtr) \$1.117M Total o

FY1997 Plans:

- Research and develop AIN candidate configurations of potential voice and data AIN services in support of NS/EP emerging requirements and those necessary to support emergency operations on the NII (\$225K) (1st Qtr - 4th Qtr) 0
- Plan for and demonstrate proof of concept strategies for offering AIN services and demonstrate interoperability across the o

Page 13 of 19

RDTGE	E BUDGET I	TEM JUSTIF	ICATION (R	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)				DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	nications		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY 0.1	FY02	FY03	Cost to Complete	Total Cost
Advanced Intelligent Network/N091	1.117 1.115	1.115	1.298	1.280	1.242	1.280	1.300	1.304	Cont.	Cont.

Public Switched Network (PSN) across multiple service providers and with other technologies such as ISDN, ATM and PCS (\$335K) (1st Qtr - 4th Qtr)

- Assess AIN survivability, reliability, interoperability and security concerns for NS/EP voice and data applications and influence industry to act on NS/EP concerns (\$275K) (1st Qtr - 4th Qtr) 0
- Follow-on to FY96 initiatives to plan demonstrations that remain current with planned industry capabilities and issues, and influence the design of AIN services to be responsive to the needs of the NS/EP community (\$280K) (1st Qtr - 4th Qtr) \$1.115M Total 0

FY1998 Plans:

- Identify new intelligent network capability and set 2 and 3 standards applications for NS/EP (\$218K) (1st Qtr - 4th Qtr)
- Conduct proof of concept demonstration of new services as they apply to Government Emergency Telecommunications Service (GETS) (\$645K) (1st Qtr - 4th Qtr) 0
 - Assess AIN integration opportunities with DISN (\$435K) (1st Qtr 4th Qtr) \$1.298M Total

FY 1999 Plans:

- Conduct AIN network interoperability testing across multiple carriers (\$640K) (1st Qtr 4th Qtr) 0
 - Assess AIN third party implementations for NS/EP (\$205K) (1st Qtr 4th Qtr)
- Determine AIN applications for GETS Network Management (\$435K) (1st Qtr 4th Qtr) \$1.280M Total

. Program Change Summary

Drawing Dresident's Budget (FV 1997)	FY 1996	FY1997	FY1998	FY1999	
	1.393	1.421	1. 440	1.985	
opriated Value	276	306			
Adjustments to Budget Year Since FY 97 President's Budget			648	705	
Current President's Budget (FY 1998)	1.117	1.115	1.298	1.280	
	Dage 14 of 19				

RDTGE E	SUDGET IT	EM JUSTIF	ICATION (RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	it)			DATE: F	February 1997	7
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Support System(N	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	TURE tional Co 303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	ons	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Advanced Intelligent Network/N091	1.117	1.117 1.115	1.298	1.280	1.242	1.280	1.300	1.304	Cont.	Cont.

Change Summary Explanation

Funding: FY96 adjustment due to below threshold reprogramming.

FY98 and FY99 changes due to realignment of effort to project N095, Telecommunications Integration Support, and revised fiscal FY97 adjustment represents an administrative breakout of Project N095, NS/EP Telecommunication Integration Support.

guidance.

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary: N/A

D. Schedule Profile

FY96 - 4th quarter: Contract Award - 1 July 1996

FY97 - 2nd quarter: Develop AIN Open Network Architecture and Demonstrations AIN Multimedia Applications for NS/EP

FY98 - 4th quarter: AIN Integration with DISN

FY99 - 4th quarter: AIN Interoperability with GETS demonstration

Page 15 of 19

RDIGE PROGRAM ELEMENT/PROJECT COST BREA	BREAKDOWN	(R-3)	Ω	DATE: February 1997	February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLATURE Support of the National (NCS)/0303127K/Advanced	ŀ	Communications System Intelligent Network (N091)	ystem ork (N091)
A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories	FY1996	FX1997	FY1998	, and	FY1999
Engineering & Technical Service Total	1,117 1,117	1,115 1,115	1,298	m m	1,280
B. <u>Budget Acquisition History and Planning Information</u> (\$000) Performing Organizations					
Support & Management Organization Product Development Organization Total Project	Budget <u>FY1996</u> 393 724 1,117	Budget Budget <u>FY1997</u> 446 449 669 849 1,115 1,298	8 9 9 8 t	Budget <u>FY1999</u> 440 840 1,280	Total <u>Program</u> Cont. Cont.
rage .	rage to or 19				

RDTGE E	BUDGET IT	RDIGE BUDGET ITEM JUSTIF	rication (R-2 Exhibit)	R-2 Exhib	oit)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support o. System(NC	R-1 ITEM NOMENCLATURE Support of the National System(NCS)/P.E.0303127K	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS) / P.E. 0303127K	nications		
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
NS/EP Telecommunications Integration Support/N095	.204	.204	.455	.470	.470	.470	.479	.479	Cont.	Cont.

Mission Description & Budget Item Justification:

Committee of Principals (COPs) and the executive agent test and exercise programs and procedures of evaluation of the capability of the nation's telecommunications resources to meet national security or emergency preparedness telecommunications requirements. existing and planned NS/EP telecommunications programs, initiatives, services, and emerging technologies to meet national requirements. It will provide essential information for decision-making and assessment of acquisition risks. Develop for consideration by the NCS This project will assess the readiness and capabilities of This project is a breakout from project N091, Advanced Intelligent Network.

FY1996 Accomplishments:

- Develop Test and Evaluation Master Plans (TEMPS) for evaluating program performance of emerging communications technologies (\$100K) (1st Qtr - 4th Qtr)
- Report on test and evaluation on existing NCS NLP and baseline programs designed to meet national requirements. (\$104K) (1st Qtr - 4th Qtr) \$.204M Total 0

997 Plans:

Evaluate exercises and training events to determine capabilities needed to respond to NS/EP emergencies. (\$204K) (1st Qtr - 4th Qtr) \$.204M Total 0

Y 1998 Plans:

- Conduct and report on test and evaluation of readiness and capabilities of OMNCS programs, plans and procedures in (\$151K) (1st Qtr - 4th Qtr) accordance with NS/EP functional requirements. 0
- Provide test and evaluation as required for NCS National Level Program (NLP), primary asset and management system support 0
- Assess NS/EP telecommunications required features and their possible expansion for NS/EP telecommunications application. (\$152K) (1st Qtr - 4th Qtr) \$.455M Total 0

FY 1999 Plans:

Assess emerging technology, existing plans to transition, and the applicability of industry services and assets for NS/EP telecommunications demonstrations (\$156K) (1st Qtr - 4th Qtr) 0

Page 17 of 19

			O	UNCLASSIFIED	O.					
RDTG	E BUDGET 1	RDIGE BUDGET ITEM JUSTIFI	'ICATION (R	CATION (R-2 Exhibit)				DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Support of System(NCS	R-1 ITEM NOMENCLATURE Support of the National Communications System(NCS)/P.E.0303127K	TURE onal Commur 3127K	ications		
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
NS/EP Telecommunications Integration Support/N095	.204	.204	.455	.470	.470	.470	.479	.479	Cont.	Cont.
O Assess the utility of NS/EP communications through associated technology demonstrations (\$157K) (1st Qtr - 4th Qtr) O Provide test and evaluation assessments in accordance with the NS/EP architecture and NCS stratinitiatives, products and services (\$157K) (1st Qtr - 4th Qtr) \$.470M Total	S/EP commution assessind service	unications sments in	through associated accordance with the (1st Qtr - 4th Qtr)	sociated to with the 1	echnology demo NS/EP architec \$.470M Total	lemonstrati tecture an	ons (\$157K) tegic plan	hrough associated technology demonstrations (\$157K) ccordance with the NS/EP architecture and NCS strategic plan on programs, 1st Qtr - 4th Qtr) \$.470M Total	
B. Program Change Summary				iz.	FY 1996	FY1997	797	FY1998	#V1 999	σ
Previous President's Budget (FY 1997) Appropriated Value	FY 1997)			"	*	* * *		*	*	
Adjustments to Appropriated Value	alue								-	

Change Summary Explanation

Adjustments to Budget Year Since FY 97 President's Budget Current Budget Submit/President's Budget (FY 1998) * This project is an administrative breakout from Project N091, Advanced Intelligent Network.

.470

.455

.204

.204

- C. Other Program Funding Summary: N/A
- D. Schedule Profile

FY98 Contract Award - 1 October 1998 FY99 Contract Award - 1 October 1999 Page 18 of 19

RDTLE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	(R-3)	DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Support of the National Communications (NCS)/0303127K/NS/EP Telecomm Integrati	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/NS/EP Telecomm Integration Support/N095
A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories	FY1997 FY1	FY1998
Engineering & Technical Service Total	204 4	455 470 455 470
B. <u>Budget Acquisition History and Planning Information</u> (\$000) Performing Organizations		
Support & Management Organization 50 Product Development Organization 154 Total Project 204	Budget FX1997 50 154 204 455	Budget Total EX1999 Program 94 Cont. 470
Page 19 of	19	

RDTGE E	BUDGET IS	RDTGE BUDGET ITEM JUSTIF	rication (R-2 Exhibit)	R-2 Exhib	oit)			DATE:	February 1997	761
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Defense M	R-1 ITEM NOMENCLATURE Defense Message System/Pi	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K	129K		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FYO1	FY02	FY03	Cost to Complete	Total Cost
Project H80, Defense Message System (DMS)	*	1.353	0	0	0	0	0	0	0	1.353
										1

validated messaging requirements are satisfied through the use of a COTS-based, multi-level secure messaging and directory service. The DMS provides the defense community with a more interoperable, cost effective messaging/directory components/services; technology insertion and service demonstrations; and influencing industry to include DMS features service than that which is in place today. Current support is focused on developing secure messaging, directory, and management services through requirements definition and refinement; target component Developmental, Initial and Final funded in PE0303126K. The purpose of this project is to provide system engineering to ensure that JS and OSD (C3I) *This project is not a new start. Prior to FY 1997, it was Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional interoperability requirements and This program element is under budget activity 07 because it supports Mission Description & Budget Item Justification: as part of their standard product offerings. operational systems development.

(U) FY 1996 Accomplishments:

Work is performed in PE0303126K.

(U) FY 1997 Plans:

as tactical environments, and extending beyond DMS to include EC/EDI, GCCS/GCSS, DTS, and others.(\$652K) (1st - 4th Qtr) sensitive but unclassified messaging, directory, security, and service management capabilities across strategic as well execution, & results analysis and finalization of revisions to Functional Security and Performance (FSP) criteria and o Perform engineering, specification development, and deployment assistance to support LRD, IOC, and Post IOC for o Support the Post IOC test and evaluation effort through Technical Insertion Environment scenario development, compliancy definition. (\$251K) (3rd - 4th Qtr)

o Perform system lifecycle/evolution engineering to account for growth, policy and requirements changes, MISSI and commercial product changes. (\$250K) (1st - 4th Otr)

o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. (\$200K) (1st - 4th Qtr)

This project has transitioned to O&M appropriation. (U) FY 1998 Plans:

\$1.353M Total

age 1 of 3

RDIGE B	SUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION	CATION	(R-2 Exhibit)	oit)			DATE: Fe	February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM Defense	R-1 ITEM NOMENCLATURE Defense Message Syste	m/PE	0303129K		
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY 0.3	Cost to Complete	Total Cost
Project H80 Defense Message System (DMS)	*	1.353	0	0	0	0	0	0	0	1.353
B. Program Change Summary			FVQ6	EV07	Ĭ.	00/	LYDO			
Previous President's Budget (FY 1997)			*	2.532	리 <u>(</u>	2.674	2.745			
Appropriated Value Adjustments to Appropriated Value				2.532						
Adjustments to Budget Year Since FY 1997 President's Budget	esident's Budg	t t			-2	-2.674	-2.745			
Current Budget Submit/President's Budget (FY 1998)	(8661)			1.353	J	0	0			
Change Summary Explanation: Funding: *FY96: Work is performed in PE0303126K	n PE03031261	, i								
FY97 reduction is due to Congressional adjustment to Defense-wide Investment Appropriation and below threshold reprogramming. FY98 and FY99: Project has transitioned to O&M appropriation.	ngressional ad s transitioned to	justment to Del o O&M appropi	ſense-wide Inve ⊓iation.	stment Approp	riation and belc	w threshold ref	rogramming.			
C. Other Program Funding Summary	nary									
EY96 O&M 20.510	FY97 35.620	FY98 37.109	FY99 38.967	FY00 24.228	EY01 E	·	FY <u>0</u> 3 18.433			
PROCUREMENT 27.825	41.362	44.470	44.289	29.719		21.076 2	21.606			
D. <u>Schedule Profile</u> (U) <u>FY 1997</u> Engineering Milestones: Finalized Tactical Standardized Prototype(4 Qtr)	dized Prototyp	e(4 Qtr)								
			Pē	Page 2 of	3					

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN	CDOWN (R-3)			DATE: February	uary 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 Defer	R-1 ITEM NOMENCLATURE Defense Message System/P	CLATURE System/PE	0303129K	
A. Project Cost Breakdown	FY96	FY97	FY98		FY99
Project Cost Categories (\$000) a. Engineering and Technical Services Total	0 0	1,353 1,353			0 0
B. Budget Acquisition History and Planning Information					
Contractor or Contract Award or Performing Project Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC	Budget Budget FY96 FY97	get Budget Z <u>FY98</u>	Budget E	Budget To T	Total <u>Program</u>
Product Development Organizations : Other Contracts	0 251	0	0	0	251
Support and Management Organizations: MITRE Procurement Work Directive (PWD)	0 1,102	0 .	0	0	1,102
Total	0 1,353	3 0	0	0	1,353
Page 3 o	of 3				

RDTGE B	SUDGET IT	RDIGE BUDGET ITEM JUSTIF	ICATION (ICATION (R-2 Exhibit)	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	mmunicatio	ns Network	
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY 02	FY03	Cost to Complete	Total Cost
Total Program Element (PE) Cost	2.620	2.110	2.381	2.450	2.566	2.686	2.743	2.862	Contg	Contg
Strategic C3 Support/T70	2.361	1.882	2.127	2.179	2.254	2.329	2.379	2.479	Contg	Contg
Contingency Planning for the President/T71	.259	.228	.254	.271	.312	.357	.364	.383	Contg	Contg

Mission Description and Budget Item Justification:

(NC3) Systems Engineer. It specifically ensures a balanced, integrated capability is maintained. This project provides direct long range and specialized support to ASD(C3I) and Joint Staff (JS) for determining which programs should be the NCA and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. DISA performs this task as Nuclear C3 throughout all phases of conflict and instability. This support also provides informed decision-making linkage between Communications (NC3) systems; support positive control of nuclear forces, and connectivity between National Command supported and/or canceled, as well as supports fail safe and risk reduction. This program element is under Budget Authorities (NCA) and strategic and other appropriate forces to assure adequate command and control is maintained This program focuses on ensuring the implementation of national policy requiring Nuclear Command, Control and Activity 07 because it involves efforts supporting operational systems development.

Page 1 of 8

RDTEE E	SUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	nmunicatio	ns Network	
COST (in millions)	FY96	FY 97	FY98	FY99	FYOO	FY 0.1	FY 02	FY 03	Cost to Complete	Total
Strategic C3 Support/T70	2.361	2.361 1.882	2.127	2.179	2.127 2.179 2.254 2.329	2.329	2.379 2.479 Contg	2.479	Contg	Contg

Mission Description & Budget Item Justification:

This element resolves design, engineering, performance and conditions of stress or war. It evaluates the operational capability for the Nuclear Command and Control System (NCCS), This project has four elements: strategic planning, operational assessments, communications plans, and engineering. i.e., strengths and weaknesses and determines the best investment strategy to evolve the current NCCS to achieve the desired capability. Threats--from terrorist activities--to regional--to global are considered. Fiscal constraints and The third Assessments of the fielded C3 systems and weapons platforms. This assessment is the sole means for positive verification of the communications plans, procedures, operations orders, training, equipment and system configuration from end-to-end. It includes both strategic, theater-to-national level C3 interfaces into the NC3 systems. The tests developing communications plans, procedures, operations orders and Battle Staff certification, and keeping these plans engineering related functions. It includes mission and functional technical requirements definition; alternative designs and solutions; program policy and guidance; subsystem and network integration; modeling; test and evaluation; Together, these elements perform all of the functions of the NC3 systems engineer and all of the NCA and Nuclear C3 support for ASD(C3I). The first element is Strategic Planning which is done for ASD(C3I) and the Joint Staff. The fourth element of this project provides engineering guidance and participates in all NC3 system life cycle systems element of this project is to maximize the operational readiness of the National Military Command System (NMCS) by The second element is Operational and procedures accurate as policy and forces change. Under this element, Battle Staff proficiency is verified. are the long range plans and vulnerability assessments done to ensure NCA and NC3 are always adequate under all are performed in an operational setting with Joint Chiefs of Staff (JCS), CINC and nuclear forces worldwide. other top level guidance are also significant factors influencing these plans. development, deployment, installation and problem isolation. interoperably issues for critical strategic systems.

Page 2 of 8

RDT&E 1	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Feb	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	mmunicatio	ns Network	
COST (in millions)	FY96	FY 97	FY 98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Strategic C3 Support/T70	2.361	1.882	2.127	2.179	2.254	2.329	2.379	2.479 Contg		Contg
(U) FY 1996 Accomplishments:										

- o Reduced NC3 Operational Assessments/Positive Command and Control (Sep 96; \$1,238K).
 - o Selected communications plans updating and certifications (Sep 96; \$433K).
- o Identified NC3 communications requirement for Proliferation (Sep 96; \$529K)
- o Commenced validating new architecture implementing Nuclear Posture Review (NPR) recommendations (Sep 96; \$161K). \$2.361M Total

(U) FY 1997 Plans:

- o Continue reduced NC3 Operational Assessments/Positive Command and Control (Sep 97; \$1,092K).
 - o Continue selected communications plans updating and certifications (Sep 97; \$320K).
- o Complete NC3 communications requirement for Proliferation (Sep 97; \$414K).
- o Validate new architecture to implement Commercial-Off-The-Shelf (COTS) equipment into NC3 (Sep 97; \$56K). \$1.882M Total

(U) FY 1998 Plans:

- o Continue reduced NC3 Operational Assessments/Positive Command and Control (Sep 98; \$1,212K).
- o Continue selected communications plans updating and certifications (Sep 98; \$340K).
 - o Complete NC3 communication requirement for Proliferation (Sep 98; \$447K)
- o Validate new architecture to implement COTS equipment into NC3 (Sep 98; \$128K).

\$2.127M Total

RDTGE 1	BUDGET IT	RDIGE BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM NOMENC Minimum Essential (MEECN)/0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge (MEECN) /0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) /0303131K	mmunicatio	ns Network	
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
Strategic C3 Support/T70	2.361	1.882	2.127	2.179	2.254	2.329	2.127 2.179 2.254 2.329 2.379 2.479 Contg	2.479	Contg	Contg
1111 FV 1000 P										

(U) FY 1999 Plans:

- o Continue reduced NC3 Operational Assessments/Positive Command and Control (Sep 99; \$1,155K).
 - o Continue selected communications plans updating and certifications (Sep 99; \$545K)
 - o Complete NC3 communication requirement for Proliferation (Sep 99; \$349K)
- o Validate new architecture to implement COTS equipment into NC3 (Sep 99; \$130K).
 - \$2.179M Total

m

Acquistion strategy: MITRE Corporation, McLean, VA; Electrospace Systems, Inc., Arlington, VA; Sciences Applications International Corporation (SAIC), McLean, VA; Naval Space and Warfare Systems Command (SPAWAR), Washington, DC.

Program Change Summary:	FY96	FY 97	FY98	FY99
Previous President's Budget (FY97)	2.361	2.075	2.227	2.340
Appropriated Value	2.047	2.075		
Adjustments to Appropriated Value	+.314	193		
Adjustments to Budget Years Since FY97 President's Budget			100	161
Current Budget Submit/President's Budget (FY98)	2.361	1.882	2.127	2.179
Change Summary Explanation:				

FY96 increase due to below threshold reprogramming.

FY97 decrease due to congressional adjustment to Defense-wide investment appropriation.

FY98 and FY99 decrease due to revised fiscal guidance.

Page 4 of 8

		al št	1 11	st	
,		Total Cost	Contg	Total Cost Contg	
DATE: February 1997	ns Network	Cost to Complete	Contg	Total Contg	for JS.
DATE: Fek	ATURE Emergency Communications Network	FY 03	2.479	EY99 .951	Scal year (1996-1999). Center Operation Order completed for Joint Staff (JS). Assessment (Polo Hat) completed for JS. Exercise (CINCSPACE, CINCSTRAT, National Airborne Operation Center). Ons Exercise completed for JS. Ion completed for JS. Ial Report to ASD(C3I). Exercise (CINCPAC). Assessment (Polo Hat) completed for JS. Ions Evaluation CINCEUR. Lions System (FCS). Assessment (Polo Hat) completed for JS. Procedures CJCS Emergency Action Procedures (EAP) Vol 7 completed for incations Plan completed for JS.
	TURE nergency Co	FY 02	2.379	<u>FY98</u>	e Operati
	1 🛶	FY01	2.329	FY97	oint Staff . al Airborne . dures (EAP)
it)	R-1 ITEM NOMENC: Minimum Essential (MEECN)/0303131K	FYOO	2.254	<u>립</u>	r completed for Joint completed for JS. CINCSTRAT, National Aid for JS. completed for JS. R. completed for JS. ency Action Procedurestion. ed for JS.
(R-2 Exhibit)		FY99	2.179	FY96	completed for CINCSTRAT, Nation. completed for Completed for TR. completed for TR. completed for TR. completed for trion.
FICATION (FY98	2.127		1996-1999). ation Order completed for Joint (Polo Hat) completed for JS. INCSPACE, CINCSTRAT, National Air e completed for JS. ed for JS. o ASD(C3I). INCPAC). (Polo Hat) completed for JS. ion CINCEUR. (FCS). (FOlo Hat) completed for JS. Andernization. an completed for JS.
ITEM JUSTIF		FY97	1.882		al year (1) ther Opera sessment (ercise (CI complete Report to ercise (CI sessment (sessment (sessment (codures C ocedures C ocedures C ocedures C
BUDGET	ы	FY96	2.361	Summary: nance:	each fisca ommand Cer ations Ass stance Exe ew" Report inications escription er Annual stance Exe ations Ass inications nunications nunications itions Pro itions Pro itions Pro
RDTGE	APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	COST (in millions)	Strategic C3 Support/T70	C. Other Program Funding Summar Operation and Maintenance:	Events cited below occur in each fiscal year (1996-1999). 1st Qtr - Strategic Mobile Command Center Operation Order 1st Qtr - Strategic Communications Assessment (Polo Hat) of 1st Qtr - JS/CINC Staff Assistance Exercise (CINCSPACE, CI 1st Qtr - ASD(G31) "NC3 Review" Report. 1st Qtr - ASD(G31) "NC3 Review" Report. 1st Qtr - ASD(G31) "NC3 Review" Report. 2nd Qtr - Non-Strategic Communications Exercise completed 2nd Qtr - JS/CINC Staff Assistance Exercise (CINCPAC). 2nd Qtr - JS/CINC Staff Assistance Exercise (CINCPAC). 2nd Qtr - Strategic Communications Assessment (Polo Hat) of 3rd Qtr - Complete Fiber Communications System (FCS). 3rd Qtr - Complete Fiber Communications System (FCS). 3rd Qtr - Emergency Communications Procedures CJCS Emerger 4th Qtr - Complete Early Pentagon Connectivity Modernizati 4th Qtr - NMCS/DOD Emergency Communications Plan completec

	RDT&	RDILE PROGRAM ELEMENT/PROJECT	ELEMENT/PROJ		COST BREAKDOWN	WN (R-3)			20	DATE: February	, 1997
APPROPRIATION/BUDGE: RDI&E, Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07	IVITY				R-1 1 Minim 03031	R-1 ITEM NOMENCLATU Minimum Essential Emer 0303131K/Strategic C3	ITEM NOMENCLATURE mum Essential Emerge 131K/Strategic C3 Su	RE cgency Communi Support (170)	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K/Strategic C3 Support (170)	WORK (MEECN) /
A. <u>Project</u> Projec	oject Cost Breakdown: (Project Cost Categories	<u>wn</u> : (\$000) ories	•		FY96	FY97		FY98	FY99		
a. Sy	Systems Engineering	ering			2,361	1,882	2	2,127	2,179	6	
TOTAL					2,361	1,882	7	2,127	2,179	6	
B. <u>Budget Acquisition</u> Support and Management	Budget Acquisition History and Planning Information: ort and Management Organizations	History and P Organizations	<u>Planning Ir</u> s	ıformati	: u o						
Contractor or Government Performing	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office <u>EAC</u>	Prior to <u>FY96</u>	Budget <u>FY96</u>	Budget <u>FY97</u>	Budget <u>FY98</u>	Budget <u>FY99</u>	Budget to Complete	rotal Program
Multiple Performing Activities	SS/C CPAF CPFF MIPR WR					2,361	1,882	2,127	2,179	Contg	Contg
TOTAL PROJECT				·		2,361	1,882	2,127	2,179		
					Page 6 of	E 8					

RDTGE B	SUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhib	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDI&E, Defense Wide/07					R-1 ITEM Minimum Es 0303131K	R-1 ITEM NOMENCLATURE Minimum Essential Emerge 0303131K	TURE nergency Co	mmunicatio	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) / 0303131K	MEECN) /
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Contingency Planning for the President (CPP)/T71	.259	.228	.254	.271	.312	.357	.364	.383	.383 Contg	Contg

A. Mission Description & Budget Item Justification:

All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request.

B. Program Change Summary:

	FY96	FY97	FY98	FY99	
Previous President's Budget (FY97)	.259	.236	.255	.272	
Appropriated Value	.222	. 236			
Adjustments to Appropriated Value	.037	008		-	
Adjustments to Budget Year Since FY97 President's Budget			001	001	
Current Budget Submit/President's Budget (FY98)	.259	.228	.254	.271	
Change Simmary Explanation.					

FY96 change due to below threshold reprogramming.

FY97 decrease due to Congressional adjustment to Defense-wide investment appropriation. FY98-99 decrease due to revised fiscal guidance.

C. Other Program Funding Summary:

Information can be provided upon request.

Schedule Profile:

N/A

Page 7 of 8

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R	COST BREAKDOWN	1.	3)			DATE: February	1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITE Minimum 03031318	Essenti (/Contin	ITEM NOMENCLATURE mum Essential Emerge 131K/Contingency Pla	ency Com	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN) / 0303131K/Contingency Planning for the President (T71)	ork (MEECN)/ : (T71)
A. <u>Project Cost Breakdown</u> : (\$000) Project Cost Categories	FY96	·	FY97	X.I	FY 98	<u>FY99</u>	
a. Systems Engineering	259	,	228	254	4	271	
TOTAL	259		228	254	4	271	
B. <u>Budget Acquisition History and Planning Information</u> : Support and Management Organizations Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior Activity Vehicle Date EAC EAG	t t	Budget Bu	Budget B	Budget]	Budget EY99	Budget to Complete	Total Program
Miscellaneous	25	259 228		254	271	Contg	Contg
Government Furnished Property: N/A					•		
TOTAL PROJECT	259	228	•	254	271		
L.	Page 8 of 8						

RDTGE E	SUDGET IT	RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	ICATION (R-2 Exhit	it)			DATE: Fe	DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C4I for	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303149K	TURE or/030314	9K		
COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total Cost
Joint C3I Surveillance & Reconn./D8A	0	2.851	0	0	0	0	0	0	0	2.851

A. Mission Description & Budget Item Justification: The Joint Command, Control, Communications, Computers, Intelligence Surveillance and Reconnaissance (C4ISR) Battle Center will assimilate demonstrations and experiments of large scale engineering required for architecture Chiefs of Staff (CJCS) initiative to address the need to provide comprehensive joint warfighting capability that maintains a competitive concepts surface, these concepts will be developed to share all C4ISR information with precision force generators which will engender a C4ISR infrastructure to maintain this competitive advantage. The Center will support experiments in mission with actual battle scenarios and assessment specific parameters by utilizing the latest technology insertion and applications to provide a consistently improving state of readiness for the joint warfighter. This program element is under Budget Activity 07 because it supports operational powerful environment for Joint operational innovations. Industry driven technology advancements dictate rapid insertion into the DoD development of Joint warfighting systems integration which leverage C4ISR. The Center grew out of the FY1995 Chairman of the Joint military advantage dependent on the ability to effectively field evolutionary systems and equipment which assure joint operational capability dominance by quickly organizing and testing innovative C4ISR concepts. The Center will also ensure that as new C4ISR systems development

(U) FY 1996 Accomplishments: N/A

(U) FY 1997 Plan:

o Establish the technical and operational infrastructure organic/unique to the Joint C4ISR Battle Center mission and functions. (Completed) (\$2.851M Total)

(U) FY 1998 Plans:

o This project has been transferred to the Joint Staff begining in FY 1998.

Page 1 of 3

	RDTGE	RDTEE BUDGET I	ITEM JUSTIF	ICATION	(R-2 Exhibit)				DATE: February	ruary 1997	
A.R.D	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM C4I for t	ITEM NOMENCLATURE for the Warrior/0	ITEM NOMENCLATURE for the Warrior/0303149K)K		
	COST (in millions)	FY96	FY97	FY98	FY99	FYOO	FY01	FY02	FY03	Cost to Complete	Total
Jo Re	Joint C3I Surveillance & Reconn./D8A	0	2.851	0	0	0	0	0	0	0	2.851
ы́ Ü Ġ	Program Change Summary Previous President's Budget (FY 1997) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Xear Since FY 1997 President Budget Current Budget Submit/President's Budget (FY 1998) Change Summary Explanation: Funding: FY97 change due to Congressional adjustment to Defense-Wide Fy98 and FY99 changes due to functional transfer of project Other Program Funding Summary OkM Procurement Schedule Profile Fiscal Year actual and planned events by quarter. SETA support contract FFRDC support Contract	Y 1997) lue ce FY 199 t's Budge ongression due to 1 events b	7 President t (FY 1998) nal adjustme functional t	EY96 N/A t Budget nent to Defense-Wide transfer of project EY96 0 0		EY97 EY9 2.907 2.8 2.907056 -2.8 2.851 0 Investment Appropriation. to the Joint Staff. 11.383M 0 4.814M 0 4.814M 0 4.814M X X X X X X X X X X X X X X X X X X X	EY97 2.907 2.907056 2.851 at Appropriat oint Staff. 11.383M 4.814M 4.814M	EY98 2.884 2.884 0 0 0 0 0 0	EY99 2.861 0 0 0 0 0 0	- -	
				<u>α</u> ,	Page 2 of 3		:				ľ

RDIGE PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	AKDOWN (R-3)	.3)			DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 C4I Reco	R-1 ITEM NOMENCLATURE C41 for the Warrior/0303 Reconn./D8A	ENCLATU arrior/03	RE 03149K/	ITEM NOMENCLATURE for the Warrior/0303149K/Joint C3I Surveillance & onn./D8A
A. Project Cost Breakdown (\$000)	FY96	FY97	드	FY98	FY99
Systems Engineering	0	2,851		0	0
B. Budget Acquisition History and Planning Information: Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office	Prior to	Rudae	g Joseph	± 6 5 7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	† 6 P. C.
Date EAC	FY 96	FY 96	<u>FY 97</u>	FY98	EX 99
All Other Contracts	0	0	2,851	0	0
Subtotal Contracts	0	0	2,851	0	
In House Engineering & Technical Support: N/A					
TOTAL PROJECT	0	0	2,851	0	0
Page	3 of 3				